



1. **Name :** Dr. S. R. Joshi, FNASc
2. **Designation :** Professor
3. **Department :** Department of Biotechnology & Bioinformatics  
North Eastern Hill University  
Mawkynroh, Umshing, Shillong-793022  
Meghalaya INDIA
4. **Email :** srjoshi2006@yahoo.co.in ; [srjoshi2006@gmail.com](mailto:srjoshi2006@gmail.com) ; [srjoshi@nehu.ac.in](mailto:srjoshi@nehu.ac.in)
5. **Mobile :** +91-364-2544948 (R); +91-9436102171 (M)
6. **Office No :** +91-364-2722405 (O)
7. **Qualifications :** M.Sc. (NEHU), Ph.D (NEHU)  
Bachelor of Education (B.Ed),  
Post Graduate Diploma in Computer Applications (PGDCA)
8. **Areas of Interest/Specialization :** Microbiology
9. **Experience :**
  - ❖ Lecturer, Department of Botany, St. Anthony`s College, Shillong (Feb 1989- May 1995)
  - ❖ Head, Departments of Biotechnology, St. Anthony`s College, Shillong (June 1995-May 2003)
  - ❖ Head, Department of Biochemistry, St. Anthony`s College, Shillong (Feb 1998-May 2003)
  - ❖ Lecturer, Centre for Science Education, North-Eastern Hill University, Shillong (May 2003 –Nov 2005)
  - ❖ Lecturer, Department of Biotechnology & Bioinformatics, North-Eastern Hill University, Mawkynroh, Umshing, Shillong-793022, Meghalaya INDIA (Dec 2005- Dec 2006)
  - ❖ Reader, Department of Biotechnology & Bioinformatics, North-Eastern Hill University, Mawkynroh, Umshing, Shillong-793022, Meghalaya INDIA (Dec 2006- Dec 2009).
  - ❖ Associate Professor, Department of Biotechnology & Bioinformatics, North-Eastern Hill University, Mawkynroh, Umshing, Shillong-793022, Meghalaya INDIA (Dec 2009- Dec 2012).
  - ❖ Professor, Department of Biotechnology & Bioinformatics, North-Eastern Hill University, Mawkynroh, Umshing, Shillong-793022, Meghalaya INDIA (Dec 2012- till date).
  - ❖ Head, Department of Biotechnology & Bioinformatics, North-Eastern Hill University, Mawkynroh, Umshing, Shillong-793022, Meghalaya INDIA (Feb 2021- Feb 2024)
  - ❖ Registrar (In-Charge), North-Eastern Hill University, Shillong , Meghalaya (Aug 2023- Jan 2024)
  - ❖ Director, Research & Development Cell, North-Eastern Hill University, Shillong (Dec 2023- till date)
10. **Awards :**
  - 🏆 Gold Medalist in B.Sc (Botany-Hons) Examination under NEHU.
  - 🏆 Gold Medalist in M.Sc (Botany) Examination under NEHU.
  - 🏆 Gold medalist in B.Ed Examination under NEHU.
  - 🏆 Best Graduate of North-Eastern Hill University ( 1985-86)
  - 🏆 Merit Prize winner of NEHU for B.Sc Examination.
  - 🏆 Merit Prize winner of NEHU for M.Sc Examination.

- ✚ Merit Prize winner of Meghalaya Science Society for B.Sc Examination.
- ✚ Merit Prize winner of Meghalaya Science Society for M.Sc Examination.
- ✚ Merit Prize awarded by Jawaharlal Nehru Memorial Trust, New Delhi, for B.Sc Examination.
- ✚ Merit Prize awarded by Jawaharlal Nehru Memorial Trust, New Delhi, for M.Sc Examination.
- ✚ Merit Prize winner of NEHU for B.Ed Examination.
- ✚ Recipient of Post-Matric Scholarship of Govt. of Meghalaya
- ✚ Recipient of Post-Graduate Scholarship of NEHU.
- ✚ Recipient of National Merit Scholarship of Ministry of Human Resource Development, Govt. of India, New Delhi.

### **Recognitions**

- ◆ Felicitated by the then Prime Minister of India (Late Rajiv Gandhi) for topping in Graduate Level examination of NEHU, 1986.
- ◆ Topper in the course for NCC officer in Officer Training School, Kamptee, 1997 and awarded All India Best Officer Cadet by NCC Directorate, New Delhi.
- ◆ Received Felicitations Award and Certificate of Appreciation by St. Anthony's College in 1999, for outstanding teaching and involvement in extra-curricular activities.
- ◆ Felicitated by NSS Cell of North-Eastern Hill University in 1994 for valuable contributions and services to NSS related activities.
- ◆ Awarded the best speaker trophy by ISRO for the presentation on “Role of Space Science and Technology in Science Journalism: Science communicators in the new age” at the Science Communicators Meet during 97th Indian Science Congress at University of Kerala , Trivandrum
- ◆ Awarded Dr. Ambedkar Fellowship National Award 2009 by Bharatiya Dalit Sahitya Akademi for literary and social services rendered for upliftment of less fortunates by way of writing books for School curriculum in vernacular language.

11. **Extramural Research Projects:** Completed (19); Ongoing (2)

12. **M.Sc Dissertation Guided:** 62

13. **National Academies (NASI-INSIA-IAS) Fellowship Scholars Mentored:** 11

14. **Ph.D. Supervised and Awarded:** 26 ; **Thesis Submitted:** 03; **Registered:** 07

Sl. No	Name of Ph.D. Mentee	P.G Degree
1	Dr. Ranjan K. Bhagobaty	M.Sc. (Agri.)-Aligarh Muslim University
2	Dr. Rakshak Kumar	M.Sc. Biotechnology- Madras University
3	Dr. Sharmila Thokchom	M.Sc. (Microbiology)- Madras University M.Phil -Bharathidasan University
4	Dr. Barnali Sharma	M.Sc. Biotechnology- Gauhati University

5	Dr. Purabi Saikia	M.Sc. Biotechnology- Gauhati University
6	Dr. George F. Rapsang	M.Sc. Biotechnology-North-Eastern Hill University
7	Dr. Khedarani Kojiam	M.Sc. Microbiology-Mangalore University
8	Dr. Lamabam S Devi	M.Sc. Microbiology- HNB Garhwal University
9	Dr. Polashree Khaund	M.Sc. Biotechnology-Nagpur University
10	Dr. Nathaniel A. Lyngwi	M.Sc. Biotechnology-North-Eastern Hill University
11	Dr. Archana Nath	M.V.Sc. -Assam Agricultural University
12	Dr. Subhro Banerjee	M.Sc. Microbiology- Jiwaji University, Gwalior
13	Dr. Fenella M W. Nongkhlaw	M.Sc. Biotechnology-North-Eastern Hill University
14	Dr. Archana Ojha (Joint Supervisor)	M.Sc. Microbiology- Lucknow University
15	Dr. Kaushik Bhattacharjee	M.Sc. Microbiology- Dr. MGR University, Chennai
16	Dr. H. Romola Devi (Joint Supervisor)	M.Sc. Microbiology- Bangalore University
17	Dr. Koel Biswas	M.Sc. Biotechnology- North-Eastern Hill University
18	Dr. Debajit Kalita	M.Sc. Applied Microbiology- Bangalore University
19	Dr. Madhusmita Borthakur	M.Sc. Biotechnology- VIT Vellore
20	Dr. Aishiki Banerjee	M.Sc. Microbiology- VIT Vellore
21	Dr. Susmita Paul	M.Sc. Biotechnology- Bangalore University
22	Dr. Donald A. Bareh	M.Sc. Biotechnology- North-Eastern Hill University
23	Dr. Lily Shylla	M.Sc. Biotechnology- North-Eastern Hill University
24	Dr. Augustine Lamin Ka-Ot	M.Sc. Microbiology- Sikkim University
25	Ms. Upashna Chettri	M.Sc. Microbiology- North Bengal University
26	Mr. Welfareson Khongriah	M.Sc Microbiology, Pondicherry University
27	Ms. Nirmal Akoijam (submitted)	M.Sc Biotechnology, - North-Eastern Hill University
28	Mr. Stevenson Thabah (submitted)	M.Sc Biotechnology, - North-Eastern Hill University
29	Mr. Aawaz K. Rai (submitted)	M.Sc Microbiology, North Bengal University

#### Research Team

1.	Dr. Macmillan Nongkhlaw	PDF:DST-Inspire Faculty Awardee/DS Kothari Fellow (PhD-JNU)
----	-------------------------	--

2.	Mr. Bishal Pun	M.Sc. Biotechnology- North-Eastern Hill University
3.	Ms. Debaraty Chakraborty	M.Sc. Biotechnology- SGRITS, Dehradun, Uttarakhand
4.	Mr. Arigo W. Sangma	M.Sc Biotechnology- Mizoram University
5.	Mr. Vishal Kumar Mohan	M.Sc Microbiology- Punjabi University, Patiala
6.	Ms. Sheetal Joshi	M.Sc Biotechnology- North-Eastern Hill University
7.	Ms. Piyali Das	M.Sc Biotechnology- North-Eastern Hill University
8.	Ms. Deihaphishisha Kharpran	M.Sc Biotechnology- North-Eastern Hill University

### 15. Administrative responsibilities:

- Member, Board of School of Life Sciences, NEHU, Shillong
- Member, School Board of Physical Sciences. NEHU, Shillong
- Member, Institutional Biosafety Committee, Mizoram University, Mizoram
- Member, Institutional Biosafety Committee, NEHU, Shillong
- Member, Board of Studies, Biotechnology & Bioinformatics, NEHU, Shillong
- Advisory member, IQAC, St. Anthony's College, Shillong
- Advisory Member, Star College Scheme, St. Edmund's College, Shillong
- Advisory Member, Star College Scheme, St. Mary's College, Shillong
- Advisory Member, Star College Scheme, Lady Keane College, Shillong
- Deputy Coordinator, UGC-SAP Scheme, Biotechnology & Bioinformatics, NEHU, Shillong
- Coordinator, DST-FIST Programme, Biotechnology & Bioinformatics, NEHU, Shillong
- Task Force Member, DST-SERB, Govt of Inida
- Secretary, North East Region Local Chapter, The National Academy of Sciences, India (NASI), Allahabad
- Editor, The NEHU Journal, NEHU, Shillong (2018-2021).
- Member, Board of Post Graduate Studies in Botany, Nagaland University, Lumami, Nagaland
- Member, Scientific Advisory Committee, National Agri-Food Biotechnology Institute (NABI), Mohali
- Member, Scientific Advisory Committee, Centre for Innovative and Applied Bioprocessing (CIAB), Mohali
- Member of Governing Body, National Agri-Food Biotechnology Institute (NABI), Mohali
- Member of Governing Body, Centre for Innovative and Applied Bioprocessing, Mohali
- Member, "State Steering Committee for SCF- School Education & SCF-ECCE" Govt. of Meghalaya
- Member, NEIGRIHMS Scientific Advisory Committee (NSAC), NEIGRIHMS Shillong.
- Member, Academic Expert, Advisory Committee of Department of Molecular Biology & Biotechnology, Tezpur University, Assam.
- Member, Scientific Advisory Committee, NIT Arunchal Pradesh.

- Coordinator, “DBT M.Sc Support Programme” Department of Biotechnology & Bioinformatics, NEHU, Shillong.
- Chairman, Board of Studies, North Eastern Institute of Ayurveda & Homoeopathy (NEIAH), Shillong.
- Chairman, NIRF Committee, NEHU, Shillong ( 2021-till date).
- Member, Institutional Ethics Committee for Human Samples/Participants(IECHSP) (2022-2025)
- Member, Editorial Board, Annual Report, NEHU, Shillong ( 2020- till date).
- Member, NAAC Committee, NEHU, Shillong.
- Member, Institutionalization of Corpus Fund, NEHU, Shillong
- Member, Board of Management, Deen Dayal Upadhyay Community College, Wahiajer, Meghalaya.
- Member, Board of Research Studies, Mizoram University(2021-2027).
- Member, Planning Committee, NEHU, Shillong.
- Member, Governing Body, College of Nursing Dr. H. Gordon Roberts Hospital, Shillong.
- Member, Board of Studies in Microbiology, NEHU, Shillong (2021-2024)
- Chairman, Board of Studies in Biotechnology, NEHU, Shillong (2021-2024)
- Member, Board of Studies in Botany, Nagaland University, Nagaland ( 2022-25)
- Member, Board of Studies in Zoology, Sikkim University, Sikkim ( 2023-26).
- Member, Institutional Ethics Committee Pasteur Institute, Govt of Meghalaya(2023-2028)
- Registrar (In-Charge), North-Eastern Hill University, Shillong , Meghalaya (Aug 2023- Jan 2024)
- Director, Research & Development Cell, North-Eastern Hill University, Shillong (Dec 2023- till date)

#### **16. Academic affiliations:**

- Indian Society of Analytical Scientists(2006)
- National Academy of Sciences, India ((NASI, Allahabad)(2007)
- Association of Microbiologists of India (2007)
- Biotech Research Society of India (2008)
- Mycological Society of India (2017)
- DNA Society of India (2018)

#### **17. Academic Fellowships/Grants Received**

- Indian Council of Medical Research (ICMR), Govt. of India Travel Grant to Maastricht, The Netherlands ( 2015)
- Department of Science & Technology, SERB, Govt. of India Travel Grant to visit Boston, USA ( 2016)
- Centre for International Co-operation in Science (CICS-INSA) Travel Grant to Maastricht, The Netherlands ( 2015)
- Department of Biotechnology Overseas Fellowship to visit The University of Hawaii at Manoa, USA (2015-2016)

#### **18. Collaboration/Mentor-Consultancy :**

- ❖ Prof. A. Chattopadhyaya, Viswa Bharati University, Santiniketan, West Bengal
- ❖ Prof. G. Haldar, National Institute of Technology, Durgapur, West Bengal
- ❖ Dr. Kiran K., National Agri-Biotechnology Institute, Mohali
- ❖ Prof. K. Chopra, Panjab University, Mohali
- ❖ Dr. C. Acharya, Bhabha Atomic Research Centre, BARC, Mumbai
- ❖ Dr. A. Bezbaruah, North Dakota State University, USA
- ❖ Prof. T.S. Basu Baul, Department of Chemistry, NEHU, Shillong
- ❖ Prof. S. Mitra, Department of Chemistry, NEHU, Shillong
- ❖ Prof. K.M. Rao, Department of Chemistry, NEHU, Shillong
- ❖ Prof. B. Myrboh, Department of Chemistry, NEHU, Shillong
- ❖ Dr. R.L. Nongkhlaw, Department of Chemistry, NEHU, Shillong
- ❖ Prof. SB Prasad, Department of Zoology, NEHU, Shillong
- ❖ Prof. M.S. Dkhar, Department of Botany, NEHU, Shillong
- ❖ Prof. S.K. Barik, Director, CSIR-NBRI, Lucknow
- ❖ Mentor for a start-up company M/s Caliche, Incubated at IIT Guwahati, Assam.
- ❖ Prof. H.S. Gehlot /Dr. Nisha Tak, JNV University, Jodhpur, Rajasthan
- ❖ Prof. P.R. Gajurel, NERIST, Arunachal Pradesh
- ❖ Prof. P Pandey, Assam University, Silchar, Assam
- ❖ Dr. Panna Das, Tripura University, Tripura
- ❖ Dr. Indira Devi, IBSD-Imphal, Manipur
- ❖ Prof. Madumita Barooah, Assam Agricultural University, Jorhat, Assam

## **Publications:**

### **Research Publications:**

1. Paul, P., Goswami, M., Chakravarty, D., Joshi, S., **Joshi, S. R.** and Nongkhlaw, R. (2024) Microwave-assisted synthesis of spiro heterocyclic scaffolds using graphite oxide as a heterogeneous carbocatalyst and study of their anti-microbial activities. *ChemistrySelect*. <https://doi.org/10.1002/slct.202402637>.
2. 161. Targu, M., Pun, B., Arora, M., **Joshi, S.R.** and Kumaria, S. (2024) Evaluation of bioactive compounds, antioxidant and antimicrobial properties of *Bulbophyllum griffithii* (Lindl.) Rchb.f., an unexplored rare orchid of therapeutic importance. *South African Journal of Botany*, 174: 283- 306
3. Rai, A.K. and **Joshi, S.R.** (2024) Probiotic lactic acid bacteria from *Aduwa ko Jaanr*, a lesser-known fermented ginger beverage from eastern Himalayan region. *Journal of Microbiology, Biotechnology and Food Sciences*, e10523. <https://doi.org/10.55251/jmbfs.10523>.
4. Das, M., Hynniewta, B.C. and **Joshi, S.R.** (2024) Bacterial contamination and antibiotic susceptibility profile of *Sus scrofa domesticus* semen. *Journal of Livestock Science*, 15: 249-254. doi. 10.33259/JLivestSci.2024.249-254.
5. Pun, B. and Joshi, S.R. (2024) Bioprospection unveils the bioactive potential of *Colletotrichum taiwanense* BPSRJ3, an endophytic fungus of an ethnomedicinal orchid, *Vanda cristata* Wall. Ex Lindl. *Systems Microbiology and Biomanufacturing*. DOI : 10.1007/s43393-024-00276-6.

6. 157. Rai, A. K. and **Joshi, S.R.** (2024) Ethnic study of *Aduwa ko Jaanr*, a lesser-known fermented ginger mild alcoholic beverage of eastern Himalayas. *International Journal of Pharmacy and Pharmaceutical Sciences*, 16(7). 48-49. doi:10.22159/ijpps.2024v16i7.51116.
7. 156. Mattal, T., Bhatia, R., **Joshi, S.R.**, Bishnoi, M., Chopra, K. and Kondepudi, K.K. (2024) GABA synthesizing lactic acid bacteria and genomic analysis of *Levilactobacillus brevis* LAB6. **3 Biotech**, 14:62, <https://doi.org/10.1007/s13205-024-03918-7>
8. 155. Chettri, U and Joshi, S.R. (2023) Changing ecosystem of a Himalayan river: A case of microbial dynamics and their behaviour along altitudinal gradient of Teesta river in Eastern Himalayan range. **ENVIS Himalayan Ecology**, 33:55-59.
9. 154. Khongriah, W., Maurya, R., Kanthi Kiran Kondepudi, K.K. and **Joshi, S.R.** (2023) Probiotic Properties and Anti-inflammatory Activity of *Bacillus* spp. Isolated from Ethnically Fermented Soybean. **Journal of Pure and Applied Microbiology**.17(4):2525-2535. doi: 10.22207/JPAM.17.4.50
10. Paul, S., Bhagobaty, R.K., Nihalani, M.C. and **Joshi, S.R.** (2023) Screening of biohydrogen producing endophytic fungi from biodiesel plants. **CLEAN - Soil, Air, Water**. DOI: 0.1002/clen.202300150
11. Chettri, U., Nongkhaw, M. and **Joshi, S.R.** (2023) Molecular evidence for the occurrence of heavy metal and antibiotic resistance genes among predominant metal tolerant *Pseudomonas* sp. and *Serratia* sp. prevalent in Teesta River. **Current Microbiology**. DOI: 10.1007/s00284-023-03334-9
12. Akoijam, N. and **Joshi, S.R.** (2023) Bioprospecting acid- and arsenic-tolerant plant growth-promoting rhizobacteria for mitigation of arsenic toxicity in acidic agricultural soils. **Archives of Microbiology**. DOI : 10.1007/s00203-023-03567-z.
13. Bhattacharjee, K., Barua, K.S., Chrungoo, N.K. and **Joshi, S.R.** (2023) Characterization of biomineralizing and plant growth-promoting attributes of lithobiontic bacteria. **Current Microbiology**. DOI :10.1007/s00284-022-03176-x
14. Bhatia, R., Singh, S., Maurya, R., Bhadada, S.K., Bishnoi, M., Chopra, K., **Joshi, S.R.**, Kondepudi, K.K. (2022) *In vitro* characterization of lactic acid bacterial strains isolated from fermented foods with anti-inflammatory and dipeptidyl peptidase-IV inhibition potential. **Brazilian Journal of Microbiology**. <https://doi.org/10.1007/s42770-022-00872-5>
15. 148. Chettri, U., Chakrabarty, T.K. and **Joshi, S.R.** (2022) Pollution index assessment of surface water and sediment quality with reference to heavy metals in Teesta River in Eastern Himalayan range, India. **Environmental Nanotechnology, Monitoring & Management**. 18 (2022) 100742. <https://doi.org/10.1016/j.enmm.2022.100742>

16. Barooah, M., **Joshi, S.R.** and Bahar, B. (2022) Editorial: Genomics and Metabolomics of Microbes in Fermented Food. **Frontiers in Microbiology**. 13:892726. doi: 10.3389/fmicb.2022.892726
17. Chettri, U. and **Joshi, S.R.** (2022) A first calibration of culturable bacterial diversity and their dual resistance to heavy metals and antibiotics along altitudinal zonation of the Teesta River. **Archives of Microbiology**. 204:241. <https://doi.org/10.1007/s00203-022-02858-1>.
18. Singh, R.I., Chettri, U., Maity, P., Ghosh, A.K., **Joshi, S.R.** and Mitra, S. (2022). Modulated Antimicrobial Activity and Drug-Protein Interaction Ability of Zinc Oxide and Cadmium Sulfide Nanoparticles: Effect of Doping with Few First-Row Transition Metals. **Journal of Cluster Science**. <https://doi.org/10.1007/s10876-022-02257-y>.
19. Das, P., Behera, M. D., Barik, S. K., Mudi, S., Jagadish, B., Sarkar, S., **Joshi, S.R.**, Adhikari, D., Behera, S.K., Sarma, K., Srivastava, P. K. and Chauhan, P.S. (2021) Shifting cultivation induced Burn area Dynamics using Ensemble Approach in Northeast India. **Trees, Forests and People**. DOI: <https://doi.org/10.1016/j.tfp.2021.100183>.
20. Shylla, L., Barik, S.K. and **Joshi, S.R.** (2021) Application of Native *Bacillus* sp. for Sustainable Jhum Agro-ecosystem. **Proceedings of the National Academy of Sciences, India Section B: Biological Sciences**. DOI 10.1007/s40011-021-01263-w.
21. Ka-Ot, A.L and **Joshi, S.R.** (2021) Application of acid and heavy metal resistant bacteria from rat-hole coal mines in bioremediation strategy. **Journal of Basic Microbiology**. DOI:10.1002/jobm.202100241.
22. Bhattacharjee, K., Chrungoo, N.K. and **Joshi, S.R.** (2021) Cryopreservation Design for Bacterial Cell: a Non-Conventional Gizmatic Approach. **Proceedings National Academy of Sciences, India, Biological Sciences**. [doi.org/10.1007/s40011-021-01266-7](https://doi.org/10.1007/s40011-021-01266-7).
23. Akoijam, N., Dutta, S. and Joshi, S.R. (2021) Biomineralization Potential of a ureolytic fungus isolated from Mawsmai cave in Meghalaya. **The NEHU Journal**, XIX: 31-48.
24. Shylla, L., Barik, S.K., Behera, M.D., Singh, H., Adhikari, D., Upadhyay, A., Thapa, N., Sarma, K. and Joshi, S.R. (2021) Impact of heavy metals on water quality and indigenous *Bacillus* spp. prevalent in rat-hole coal mines. **3Biotech**. 11:253. <https://doi.org/10.1007/s13205-021-02808-6>.
25. Shylla L., Barik, S.K. and **Joshi, S.R.** (2021) Characterization and bioremediation potential of native heavy-metal tolerant bacteria isolated from rat-hole coal mine environment. **Archives of Microbiology**. 203: 2379-2392. DOI: 10.1007/s00203-021-02218-5.
26. Shylla, L., Barik, S.K. and **Joshi, S.R.** (2020) Impact assessment of heavy metal contamination on water quality of underground and open-cast coal mines. **The NEHU Journal**. XVIII (2): 58-72.
27. Paul, S., Bhagobaty, R.K., Nihalani, M.C. and **Joshi, S.R.** (2020) Characterization of oleaginous endophytic fungi of biodiesel plants as potential biofuel minifactories. **Biomass and Bioenergy**. 142:



105750. <https://doi.org/10.1016/j.biombioe.2020.105750>.
28. Dkhar, L., Sawkmie, M., Ka-Ot, A.L., **Joshi, S.R.**, Kaminsky, W. and Rao, K.M. (2020) Cp and indenyl ruthenium complexes containing dithione derivatives: Synthesis, antibacterial and antifungal study. **Journal of Organometallic Chemistry.** 923: 121418. <https://doi.org/10.1016/j.jorganchem.2020.121418>.
29. Pasha, S.V., Behera, M.D., Mahawar, S.K., Barik, S.K. and **Joshi, S.R.** (2020) Assessment of shifting cultivation fallows in Northeastern India using Landsat imageries. **Tropical Ecology.** <https://doi.org/10.1007/s42965-020-00062-0>
30. Borthakur M, Gurung AB, Bhattacharjee A and **Joshi SR** (2020) Analysis of the bioactive metabolites of the endangered Mexican lost fungi *Campanophyllum*- a report from India. **Mycobiology**, DOI: 10.1080/12298093.2020.1723388.
31. Ingti B, Upadhyay S, Hazarika M, Khyriem AB, Paul D, Bhattacharya P, **Joshi SR**, Bora D, Dhar(Chanda) D and Bhattacharjee A (2020) Distribution of carbapenem resistant *Acinetobacter baumannii* with blaADC-30 and induction of ADC-30 in response to beta-lactam antibiotics. **Research in Microbiology.** DOI: 10.1016/j.resmic.2020.01.002.
32. Dutta A, Rahman N, Khongriah W, Nongrum R, **Joshi SR** and Nongkhlaw R (2019) l-Glutamine supported on core-shell silica iron oxide nanoparticles: A highly efficient organocatalyst for synthesis of spirooxindoles. **Chemistry Select.** 4, 12399 – 12408. <https://doi.org/10.1002/slct.201902279>.
33. Baul TSS, Nongsiej K, Ka-Ot AL, **Joshi SR**, Rocha BGM, daSilva MFCG (2020) Synthesis, crystal structures, magnetic properties and antimicrobial screening of octahedral nickel(II) complexes with substituted quinolin-8-olates and pyridine ligands. **Journal of Molecular Structure.** 1200: 127106. [doi.org/10.1016/j.molstruc.2019.127106](https://doi.org/10.1016/j.molstruc.2019.127106)
34. Paul S, Bhagobaty RK, Nihalani MC and **Joshi SR** (2019) Are endophytic fungi a feasible option as biofuel nanofactories? **International Journal of Scientific Research and Review.** 7(5): 1112-1118.
35. Nongkhlaw M and **Joshi SR** (2019) Molecular insight into the expression of metal transporter genes in *Chryseobacterium* sp. PMSZPI isolated from uranium deposit. **PLoS ONE** 14(5): e0216995. <https://doi.org/10.1371/journal.pone.0216995>
36. Baul TSB, Nongsiej K, Ka-ot AL, **Joshi SR**, Leon IR and Hopfi H (2019) Tweaking the affinity of aryl-substituted diazosalicylato- and pyridine ligands towards Zn (II) and its neighbors in the periodic system of the elements, Cu (II) and Cd (II), and their antimicrobial activity. **Applied Organometallic Chemistry.** e4905. <https://doi.org/10.1002/aoc.4905>
- 37.126. Gurung AB, Pamay P, Tripathy D, Biswas K, Chatterjee A, **Joshi SR** and Bhattacharjee A

- (2019) Bioprospection of anti-inflammatory phytochemicals suggests rutaecarpine and quinine as promising 15-lipoxygenase inhibitors. **Journal of Cellular Biochemistry**. DOI: 10.1002/jcb.28634
38. Biswas K, Sharma P and **Joshi SR** (2019) Co-occurrence of antibiotic resistance and virulence determinants in enterococci isolated from traditionally fermented fish products. **Journal of Global Antimicrobial Resistance**. **17**: 79-83. DOI <https://doi.org/10.1016/j.jgar.2018.11.012>
39. **Joshi SR**, Nongbri EL and Biswas K (2018) Incidence of virulence determinants and antibiotic resistance in *Enterococcus* species of dairy origin. **Newsletter-Probiotic Association of India** , Vol 15: 9-10
40. Bhattacharjee D, Sheet SK, Khatua S, Biswas K, **Joshi SR**, Myrboh B (2018) A reusable magnetic nickel nanoparticle based catalyst for the aqueous synthesis of diverse heterocycles and their evaluation as potential anti-bacterial agent. **Bioorganic & Medicinal Chemistry**, 26: 5018-28. <https://doi.org/10.1016/j.bmc.2018.08.033>
41. Banerjee S, **Joshi SR**, Mandal T and Halder G (2018) Application of zirconium caged activated biochar alginate beads towards deionization of Cr(VI) laden water in a fixed bed column reactor. **Journal of Environmental Chemical Engineering** 6(4). 4018-4029 . DOI: 10.1016/j.jece.2018.06.011
42. Baul, TS, Nongsiej K, Biswas K, **Joshi SR** and Hopfi H (2018) Pyridine aided progression from amorphous to crystalline bis([5-(aryl)-1-diazenyl]quinolin-8-olato)zinc(II) compounds – Solution and solid-state structural characterization, nanoparticle formation and antibacterial activity. **Inorganica Chimica Acta**. DOI: 10.1016/j.ica.2018.06.049
43. Upadhyay S, Khyriem AB, Bhattacharya P, Bhattacharjee A, **Joshi SR** (2018). High-level aminoglycoside resistance in *Acinetobacter baumannii* recovered from intensive care unit patients in Northeastern India. **Indian Journal of Medical Microbiology**. 36: 43-48
44. Paul Susmita, Bhagobaty RK, Nihalani MC and **Joshi SR** (2018) Diversity and lipid content analysis of oleaginous endophytic fungi associated with biodiesel plants. **Sydowia** : 70: 27-35. DOI 10.12905/0380.sydowia70-2018-0027
45. Paul Susmita, Bhagobaty RK, Nihalani MC and **Joshi SR** (2017) Prospective oleaginous endophytic fungi isolated from biodiesel plants: An assessment of diversity and lipid content. **Kavaka**. **49**: 15-22
46. Sonu VK, Rajkumar I, Bhattacharjee K, **Joshi SR** and Mitra S (2018) Interaction of caffeine and sulfadiazine with Lysozyme adsorbed at colloidal metal nanoparticle interface: Influence on drug transport ability and antibacterial activity. **Journal of Biomolecular Structure and Dynamics**. <https://doi.org/10.1080/07391102.2018.1426497>

47. Bhattacharjee K, Palepu N R, Rao KM and **Joshi SR** (2017) Precursor-directed combinatorial biosynthesis of cephalosporin analogue by thiophene derivative utilizing endolithic bacterium *Streptomyces* sp. AL51. **3Biotech**, DOI: 10.1007/s13205-017-1051-8
48. Kalita Debajit and **Joshi SR** (2017) Study on bioremediation of Lead by exopolysaccharide producing metallophilic bacteria isolated from extreme habitat. **Biotechnology Reports. 16: 48-57.** <https://doi.org/10.1016/j.btre.2017.11.003>
49. Bhattacharjee K, Kumar S, Palepu NR, Patra PK, Rao KM and **Joshi SR** (2017) Structure elucidation and *in-silico* docking studies of a novel furopyrimidine antibiotics synthesized by endolithic bacterium *Actinomadura* sp. AL2. **World Journal of Microbiology and Biotechnology.** DOI: 10.1007/s11274-017-2343-1.
50. Biswas K, Upadhyay S, Rapsang GF and **Joshi SR** (2017) Antibacterial and Synergistic Activity Against  $\beta$ -Lactamase-Producing Nosocomial Bacteria by Bacteriocin of LAB Isolated From Lesser Known Traditionally Fermented Products of India. **HAYATI Journal of Biosciences. 24: 87-95.** <https://doi.org/10.1016/j.hjb.2017.08.008>
51. Das AR, Saha AK, **Joshi SR** and Das P (2017) Wild edible macrofungi consumed by ethnic tribes of Tripura in Northeast India with special reference to antibacterial activity of *Pleurotus djamor* (Rumph. ex Fr.) Boedijn. **International Food Research Journal 24(2): 834-838**
52. Ojha A, Tak N, Rathi S, Chouhan B, Rao SR, **Joshi SR**, Barik SK, Sprent JS, James EK, Gehlot HS (2017). Molecular characterization of novel *Bradyrhizobium* strains nodulating *Eriosema chinense* and *Flemingia vestita*, important unexplored native legumes of the sub- Himalayan region (Meghalaya) of India. **Systematic and Applied Microbiology. 40: 334-344.** <http://dx.doi.org/10.1016/j.syapm.2017.06.003>
53. Borthakur M, Gogoi J and **Joshi SR** (2017) Macro and microfungi mediated synthesis of Silver nanoparticles and its applications. **ADBU-Journal of Engineering Technology. 6(1): 00610605 (09 PP)**
54. Borthakur M and **Joshi SR** (2017) Pigskin poison earthball mushroom of Meghalaya: An identification paradox. **The NEHU Journal. XIII(1): 65-78.**
55. Soumya Banerjee, Augustine Lamin Ka-ot, **S. R. Joshi**, Tamal Mandal and Gopinath Halder (2016) Optimization of Fe<sup>2+</sup> Removal from Coal Mine Wastewater using Activated Biochar of *Colocasia esculenta*. **Water Environment Research. 89 (2016)**
56. Aishiki Banerjee, Donald A. Bareh and **S.R. Joshi** (2017) Native microorganisms as potent bioinoculants for plant growth promotion in shifting agriculture (*Jhum*) systems. *Journal of Soil Science and Plant Nutrition*, 17 (1), 127-140. <http://dx.doi.org/10.4067/S0718-95162017005000010>
57. Das AR, Borthakur M, Saha AK, **Joshi SR** and Das P (2017) Molecular Characterization and

- Antioxidant Potential of Three Wild Culinary-Medicinal Mushrooms from Tripura, Northeast India. **International Journal of Medicinal Mushrooms**, 19(1): 55–63
58. Nath A and **Joshi SR** (2017) Anti-candidal efficacy of endophytic fungi isolated from tropical ethnoveterinary plant. **Revista de Biología Tropical**. 64(4):1337-1347.
59. Ka-ot AL, Banerjee S, Haldar G and **Joshi SR** (2016). Acid and heavy metal tolerant *Bacillus* spp. from rat-hole coal mines of Meghalaya, India. **Proceedings of National Academy of Sciences. Section B: Biological Sciences**. **88(3): 1187-1198** DOI :10. 1007/s40011-017-0856-x
60. Upadhyay S, Hussain A, Ingti B, Laskar MA, Choudhury MD, Bhattacharjee A and **Joshi SR** (2016) Detection of a new class C beta-lactamase CM-139 in *Klebsiella pneumoniae* of food origin from India. **Journal of Global Antimicrobial Resistance**. DOI: 10.1016/j.jgar.2016.11.002.
61. Nongkhlaw FMW and **Joshi SR** (2017) Microscopic study on colonization and antimicrobial property of endophytic bacteria associated with ethnomedicinal plants of Meghalaya. **Journal of Microscopy and Ultrastructure**. **5: 132-139**. DOI: 10.1016/j.jmau.2016.09.002
62. Banerjee S, **Joshi SR**, Mandal T and Halder G (2017) Insight into Cr<sup>6p</sup> reduction efficiency of *Rhodococcus erythropolis* isolated from coalmine waste water. **Chemosphere**. 167 :269- 281.
63. Swer P, **Joshi SR** and Acharya C (2016) Cesium and strontium tolerant *Arthrobacter* sp. strain KMSZP6 isolated from a pristine uranium ore deposit. **AMB Express**. 6:69 DOI: 10.1186/s13568-016-0247-3.
64. Bhattacharjee K and **Joshi SR** (2016) A selective medium for recovery and enumeration of endolithic bacteria. **Journal of Microbiological Methods**. **129: 44-54** DOI:10.1016/j.mimet.2016.07.026.
66. Dey J, Ray D, Biswas K, Aswal VK, **Joshi SR**, Joachim Kohlbrecher J, Dey P and Kochi Ismail K (2016) AOT Micelles/Vesicles for Synthesis of Silver Nanoparticles and Micellar Transitions Affected by Nanoparticles. **Chemistry Select**: 1, 2864 – 2871. DOI: 10.1002/slct.201600191.
67. Sangilipandi S, Sutradhar D, Bhattacharjee K, Kaminsky W, **Joshi SR**, Chandra AK, Rao KM (2016) Synthesis, structure, antibacterial studies and DFT calculations of arene ruthenium, Cp\*Rh, Cp\*Ir and tricarbonylrhenium metal complexes containing 2-chloro-3-(3-(2-pyridyl) pyrazolyl) quinoxaline ligand. **Inorganica Chimica Acta**. 441: 95–108
68. Banerjee S, Mukherjee S, Ka-ot AL, **Joshi SR**, Mandal T, Halder G (2016) Biosorptive uptake of Fe<sup>2+</sup>, Cu<sup>2+</sup> and As<sup>5+</sup> by activated biochar derived from *Colocasia esculenta*: Isotherm, kinetics, thermodynamics, and cost estimation. **Journal of Advanced Research**. [http://dx.doi.org/ 10.1016 /j.jare.2016.06.002](http://dx.doi.org/10.1016/j.jare.2016.06.002)

69. Bareh DA, Banerjee A and **Joshi SR** (2015) Microbial dynamics and diversity in foot hills of Eastern Himalayan range: A focus on shifting cultivation. **ENVIS Himalayan Ecology**. 23: 1-8
70. Upadhyay S, **Joshi SR**, Khryiem AB and Bhattacharyya P (2016) Acquired 16s methyl transferase associated high level aminoglycoside resistance in *Acinetobacter baumannii* recovered from ICU patients from a tertiary referral hospital of northeast India. **International Journal of Infectious Diseases**. 45S-46. <http://dx.doi.org/10.1016/j.ijid.2016.02.144>
71. Nath A and **Joshi SR** (2016) Endophytic fungi from tropical ethnoveterinary plants and their antibacterial efficacy against *Pasteurella multocida* Capsular Type A strain. **Revista de Biología Tropical**. Vol. 64 (2): 733-745.
72. Borthakur M and **Joshi SR** (2016) Micrographical analysis of growth deformities in common pathogens induced by voucher fungi from India. **Journal of Microscopy and Ultrastructure**. 4: 203-210. DOI: 10.1016/j.jmau.2016.04.001.
73. Lyngwi NA, Nongkhlaw M, Kalita D and **Joshi SR** (2016) Bioprospecting of Plant Growth Promoting Bacilli and Related Genera Prevalent in Soils of Pristine Sacred Groves: Biochemical and Molecular Approach. **PLoS ONE** 11(4): e0152951. doi:10.1371/journal.pone.0152951.
75. Banerjee S and **Joshi SR** (2016) Culturable bacteria associated with the caves of Meghalaya in India contribute to speleogenesis. **Journal of Caves and Karst Studies** :78(3) 144–157. DOI: 10.4311/2015MB0131.
76. Palepu NR, Premkumar JR, Verma AK, Bhattacharjee K, **Joshi SR**, Forbes S, Mozharivskiy Y, Rao KM (2015) Antibacterial, in vitro antitumor activity and structural studies of rhodium and iridium complexes featuring the two positional isomers of pyridine carbaldehyde picolinic hydrazone ligand. **Arabian Journal of Chemistry**. <http://dx.doi.org/10.1016/j.arabjc.2015.10.011>
77. Upadhyay S, Mustafa M, **Joshi SR** (2016) Naturally evolving extended spectrum cephalosporin resistance in soil borne isolates of Enterobacteriaceae. **National Academy Science Letters**. 39. 181-184. DOI:101007/s40009-016-0463-z.
78. Khaund P and **Joshi SR** (2016) *Lentinula edodes* based GIS mapping, biometabolites and antiinflammatory activity of wild edible mushrooms from tropical ‘sacred grove’ forests of Meghalaya, India. **Revista de Biología Tropical**. Vol. 64 (1): 247-257.
79. Upadhyay S, Hussain A, Mishra S, Maurya AP, Bhattacharjee A and **Joshi SR** (2015) Genetic environment of plasmid mediated CTX-M-15 extended spectrum beta- lactamases from clinical and food borne bacteria in north-eastern India. **PLoS ONE** 10(9): e0138056. doi:10.1371/journal.pone.0138056
80. Nongkhlaw FMW and **Joshi SR** (2016) Horizontal gene transfer of the non-ribosomal peptide synthetase gene among endophytic and epiphytic bacteria associated with ethnomedicinal plants.

**Current Microbiology. 72: 1-11.** doi:10.1007/s00284-015-0910-y.

81. Banerjee S and **Joshi SR** (2016) Mineralogical footprints of bacterial biofilms associated with Labit cave, a part of the longest cave system in India. **Geomicrobiology Journal** 33(8): 699–708. DOI: 10.1080/01490451.2015.1083060
82. Das, AR, Borthakur M, Saha AK, **Joshi SR** and Das P (2015) Growth of mycelial biomass and fruit body cultivation of *Lentinus squarrosulus* collected from home garden of Tripura in Northeast India. **Journal of Applied Biology & Biotechnology. 03(04):** 17-19.
83. Lyngwi, NA and **Joshi SR** (2015) ‘Traditional Sacred Groves’, an ethnic strategy for conservation of microbial diversity. **Indian Journal of Traditional Knowledge. 14(3):** 474-480.
84. Upadhyay, S and **Joshi SR** ( 2015) Carriage of multidrug resistant integrin gene cassette arrays within environment and food isolates in a high altitude city of northeast India. **International Journal of Antimicrobial Agents. 45(suppl. 2):** S84-S85.
85. Palepu NR, Nongbri SL, Premkumar JR, Verma AK, Bhattacharjee K, **Joshi SR**, Forbes S, Mozharivskiy Y, Thounaojam R, Aguan K, Rao KM (2015) Synthesis and evaluation of new salicylaldehyde-2- picolinylhydrazone Schiff base compounds of Ru(II), Rh(III) and Ir(III) as in vitro antitumor, antibacterial and fluorescence imaging agents. **Journal of Biological Inorganic Chemistry. 20(4):**619-638. DOI: 10.1007/s00775-015-1249-3.
86. **Joshi SR**, Banerjee S., Bhattacharjee K, Lyngwi NA , Koijam K , Khaund P , Dev LS, and Nongkhlaw FMW (2015). Northeast Microbial database: A web based databank of culturable soil microbes from Northeast India. **Current Science. 108(9):** 1702-1706
87. Khaund P and **Joshi SR** ( 2014) Functional nutraceutical profiling of wild edible and medicinal mushrooms consumed by ethnic tribes in India. **International Journal of Medicinal Mushrooms 17(2): 187-197**
88. Dey J, Biswas K, Thapa U, **Joshi SR**, Kharbanga I,; Sultana N and , Ismail K ( 2014) Facile synthesis of silver nanoparticles and their synergistic antibacterial activity in combination with commercial antibiotics. **Bulletin of the Chemical Society of Japan** 88, 352–357 | doi:10.1246/bcsj.20140255
89. Upadhyay S and **Joshi SR** (2015) TEM mediated extended spectrum cephalosporin resistance in clinical and environmental isolates: A report from northeast India. **Indian Journal of Medical Research. 142: 614-617**
90. Nongkhlaw FMW and **Joshi SR** (2014) L-asparaginase and antioxidant activity of endophytic bacteria associated with ethnomedicinal plants. **Indian Journal of Biotechnology. Vol 14: 59-64**

91. Nath A, Pathak J and **Joshi SR** (2014) Bioactivity assessment of endophytic fungi associated with *Centella asiatica* and *Murraya koengii*. **Journal of Applied Biology & Biotechnology**. 2(5): 6-11. DOI: 10.7324/JABB.2014.2502
92. Devi LS and **Joshi SR** (2014) Ultrastructures of silver nanoparticles biosynthesized using endophytic fungi. **Journal of Microscopy and Ultrastructure**. 3: 29-37 DOI: 10.1016/j.jmau.2014.10.004
93. Devi LS and **Joshi SR** (2014) Evaluation of the antimicrobial potency of silver nanoparticles biosynthesized by using an endophytic fungus, *Cryptosporiopsis ericae* PS4. **Journal of Microbiology**. 58(4): 667-674. DOI 10.1007/s12275-014-4113-1
94. Nath A and **Joshi SR** (2014) Ultrastructural effect on mastitis pathogens by extract of endophytic fungi associated with ethnoveterinary plant, *Hibiscus sabdariffa* L. **Journal of Microscopy and Ultrastructure**. 3: 38-43 . DOI: 10.1016/j.jmau.2014.10.001
95. Khaund P and **Joshi SR** (2014) DNA barcoding of wild edible mushrooms consumed by the ethnic tribes of India. **Gene**. 550:123–130 DOI: <http://dx.doi.org/10.1016/j.gene.2014.08.027>
96. Khaund P and **Joshi SR** (2014) Micromorphological characterization of wild edible mushroom spores using Scanning Electron Microscopy. **National Academy Science Letters**. 37(6):521-527. DOI: 10.1007/s40009-014-0272-1
97. Khaund P and **Joshi SR** (2014) Enzymatic profiling of wild edible mushrooms consumed by the ethnic tribes of India. **Journal of Korean Society of Applied Biological Chemistry**. 57(2): 263–271
98. Banerjee S and **Joshi SR** (2014) Ultrastructural analysis of calcite crystal patterns formed by biofilm bacteria associated with cave speleothems. **Journal of Microscopy and Ultrastructure**. 2: 217-223. DOI: 10.1016/j.jmau.2014.06.001
99. Thokchom S and **Joshi SR** (2015) Screening of fibrinolytic enzymes from lactic acid bacterial isolates associated with traditional fermented soybean foods. **Food Science and Biotechnology**. 23(5): 1601-1604 (2014) DOI :10.1007/s10068-014-0217-y
100. Bhattacharjee K and **Joshi SR** (2014) NEMiD: A web-based curated microbial diversity database with Geo-based plotting. **PLoS ONE**. 9(4): e94088. doi:10.1371/journal.pone.0094088.
101. Nongkhlaw FMW and **Joshi SR** (2014) Distribution pattern analysis of epiphytic bacteria on ethnomedicinal plant surfaces: A micrographical and molecular approach. **Journal of Microscopy and Ultrastructure**. 2: 34-40. DOI 10.1016/j.jmau.2014.02.003
102. Nongkhlaw FMW and **Joshi SR** (2014) Micrographical assessment of antifungal effect of endophytic bacteria. **Proceedings of National Academy of Sciences. Section B: Biological Sciences**. DOI: 10.1007/s40011-014-0321-z

103. Nath A and **Joshi SR** (2013) Bioactivity assessment of endophytic fungi associated with the ethnomedicinal plant *Potentilla fulgens*. **World Journal of Pharmaceutical Research**. 2(6): 2596-2607
104. Rapsang GF and **Joshi SR** (2015) Molecular and probiotic functional characterization of *Lactobacillus* spp. associated with traditionally fermented fish, Tungtap of Meghalaya in Northeast India. **Proceedings of National Academy of Sciences. Section B: Biological Sciences**. 85(4): **923-933** DOI 10.1007/s40011-013-0234-2.
105. Koijam K and **Joshi SR** (2014) Exopolysaccharide production by a lactic acid bacteria, *Leuconostoc lactis* isolated from ethnically fermented beverage. **National Academy Science Letters**. 37(1):59–64 DOI 10.1007/s40009-013-0203-6
106. Sarma B, Acharya C and **Joshi SR** (2013) Characterization of metal tolerant *Serratia* spp. isolates from sediments of uranium ore deposit of Domiasiat in Northeast India. **Proceedings of National Academy of Sciences. Section B: Biological Sciences**. 86(2) 253-260. DOI: 10.1007/s40011-013-0236-0
107. Sarma B, Acharya C and **Joshi SR** (2013) Plant growth promoting and metal bioadsorption activity of metal tolerant *Pseudomonas aeruginosa* isolate characterized from uranium ore deposit. **Proceedings of National Academy of Sciences. Section B: Biological Sciences**. DOI 10.1007/s40011-012-0136-8.
108. Khaund P and **Joshi SR** (2013) Wild edible macrofungal species consumed by the Khasi tribe of Meghalaya, India. **Indian Journal of Natural Products and Resources**. 4(2):179-204
109. Bhattacharjee K, Banerjee S, Bawitlung L, Krishnappa D and **Joshi SR** (2014) A study on parameter optimization for degradation of endosulfan by bacterial consortia isolated from contaminated soil. **Proceedings of National Academy of Sciences. Section B: Biological Sciences**. 84(3):657–667. DOI: 10.1007/s40011-013-0223-.
110. Blah MM and **Joshi SR** (2013) Nutritional content evaluation of traditional recipes consumed by ethnic communities of Meghalaya, India. **Indian Journal of Traditional Knowledge**. 12(3), 498-505
111. Thokchom S and **Joshi SR** (2013) Physicochemical analysis of ethnically fermented soybean products of North-East India and molecular characterization of associated lactic acid bacteria. **Proceedings of National Academy of Sciences. Section B: Biological Sciences**. 85(2) 527-533 . DOI: 10.1007/s40011-013-0199-1
112. Nath A, Chattopadhyay A and **Joshi SR** (2013) Biological activity of endophytic fungi of *Rouwolfia serpentina* Benth, an ethnomedicinal plant used in folk medicines in Northeast India.



- Proceedings of National Academy of Sciences. Section B: Biological Sciences.** DOI: 10.1007/s40011-013-0184-8.
113. Devi LS, Bareh DA and **Joshi SR** (2014) Studies on biosynthesis of antimicrobial silver nanoparticles using endophytic fungi isolated from the ethno-medicinal plant *Gloriosa superba* L. **Proceedings of National Academy of Sciences. Section B: Biological Sciences.** 84(4):1091–1099. DOI: 10.1007/s40011-013-0185-7
114. Banerjee S and **Joshi SR** (2012) Preliminary screening and compositional analysis of bacterial biofilm from hypogean environments of Meghalaya, India. **Keanean Journal of Science.** 1:20-32
115. Banerjee S and **Joshi SR** (2012) Insights into cave architecture and the role of bacterial biofilm. **Proceedings of National Academy of Sciences. Section B: Biological Sciences.** 83(3): 277-290. DOI: 10.1007/s40011-012-0149-3.
116. Bhattacharjee K and **Joshi SR** (2013) Phylogenetic rearrangement of *Streptomyces* spp. On the basis of Internal transcribed Spacer (ITS) region using molecular morphometrics approach. **Indian Journal of Biotechnology.** 12: 67-79.
117. Kumar R, Nongkhlaw M, Acharya C and **Joshi SR** (2013) Soil bacterial metagenomic analysis from uranium ore deposit of Domiasiat in North-east India. **Current Science:**105(4): 495-498
118. Kumar R, Nongkhlaw M, Acharya C and **SR Joshi** (2013) Bacterial community structure from the perspective of the uranium ore deposits of Domiasiat in India. **Proceedings of National Academy of Sciences. Section B: Biological Sciences.** 83(4):485-497. DOI: 10.1007/s40011-013-0164-z.
119. Kumar R, Nongkhlaw M, Acharya C and **Joshi SR** (2013) Growth media composition and heavy metal tolerance behaviour of bacteria characterized from the sub-surface soil of uranium rich ore bearing site of Domiasiat in Meghalaya. **Indian Journal of Biotechnology.** 12: 115-119
120. Kumar R, Nongkhlaw M, Acharya C and **Joshi SR** (2013) Uranium (U)-tolerant bacterial diversity from U ore deposit of Domiasiat in North-East India and its prospective utilisation in bioremediation. **Microbes and Environment.** 28(1):33-41.
121. Saikia P and **Joshi SR** (2014) A study on the occurrence of non-O157 Shiga toxin-producing *Escherichia coli* isolates in retail chicken meats marketed in North-East India . **Proceedings of National Academy of Sciences. Section B: Biological Sciences.** 84:337-342 ; DOI: 10.1007/s40011-012-0143-9.
122. Lyngwi NA, Koijam K, Sharma D and **Joshi SR** (2013) Culturable bacterial diversity along the altitudinal zonations and vegetation range of tropical Eastern Himalaya. **Revista de Biología Tropical.** 61(1): 467-490

123. Nongkhlaw M, Kumar R, Acharya C and **Joshi SR** (2012) Occurrence of horizontal gene transfer of P<sub>IB</sub>-type ATPase genes among bacteria isolated from the uranium rich deposit of Domiasiat in North East India. **PLoS ONE**. 7(10): e48199. doi:10.1371/journal.pone.0048199
124. Devi LS, Khaund P, Nongkhlaw FMW and **Joshi SR** (2012) Diversity of culturable soil micro-fungi along altitudinal gradients of eastern Himalayas. **Mycobiology** 40(3): 151-158.
125. Saikia P and **Joshi SR** (2012) Changes in microfungal community in Cherrapunjee – the wettest patch on earth as influenced by heavy rain and soil degradation. **Advances in Microbiology**. 2: 456-464. doi:10.4236/aim.2012.24059
126. Banerjee S, Rai S, Sarma B and **Joshi SR** (2012) Bacterial biofilm in water bodies of Cherrapunjee: the rainiest place on planet earth. **Advances in Microbiology**.2:465-475. doi:10.4236/aim.2012.24060
127. Bhattacharjee K, Banerjee S and **Joshi SR** (2012) Diversity of *Streptomyces* spp. in eastern Himalayan region- computational RNomics approach to phylogeny. **Bioinformatics**. 8(12): 548-554
128. Kumar R, Acharya C and **Joshi SR** (2012) Diversity of uranium tolerating bacteria at Domiasiat, West Khasi Hills, Meghalaya. **Assam University Journal of Science & Technology: Biological and Environmental Sciences**. 9(1): 186-190
129. Devi LS and **Joshi SR** (2012) Antimicrobial and synergistic effects of silver nanoparticles synthesized using soil fungi of high altitudes of eastern Himalaya. **Mycobiology**: 40(1): 27-34
130. Bhagobaty RK and **Joshi SR** (2012) Antimicrobial and antioxidant activity of endophytic fungi isolated from ethnomedicinal plants of the “Sacred forests” of Meghalaya, India. **Mikologia Lekarska** 19 (1): 5-11
131. Bhagobaty RK and **Joshi SR** (2012) Enzymatic activity of fungi endophytic on five medicinal plant species of the pristine sacred forests of Meghalaya, India. **Biotechnology and Bioprocess Engineering**. 17:33-40
132. Nath A, Raghunatha P and **Joshi SR** (2012) Diversity and biological activities of endophytic fungi of *Embllica officinalis*, an ethnomedicinal plant of India. **Mycobiology** 40(1): 8-13
133. Thokchom S and **Joshi SR** (2012) Probiotic and bacteriocin efficacy of lactic acid bacteria from traditionally fermented foods: a review. **Assam University Journal of Science and Technology: Biological and Environmental Sciences**. 10(1): 142-155
134. Thokchom S and **Joshi SR** (2012) Antibiotic resistance and probiotic properties of dominant lactic microflora from *Tungrymbai*, an ethnic fermented soybean food of India. **Journal of Microbiology**. 50(3): 535-539

135. Thokchom S and **Joshi SR** (2012) Microbial and chemical changes during preparation in the traditionally fermented soybean product Tungrymbai of ethnic tribes of Meghalaya. **Indian Journal of Traditional Knowledge**. 11(1):139-42
136. Rapsang George F. and **Joshi SR** (2012) Bacterial diversity associated with *Tungtap*, an ethnic traditionally fermented fish product of Meghalaya. **Indian Journal of Traditional Knowledge**. 11(1):134-138
137. Rapsang GF, Kumar R and **Joshi SR** (2011) Identification of *Lactobacillus pobuzihii* from Tungtap—a traditionally fermented fish food and analysis of its bacteriocinogenic potential. **African Journal of Biotechnology**. 10(57): 12237-12243.
138. Bhagobaty RK and **Joshi SR** (2011) Fungal endophytes of five medicinal plants prevalent in the traditionally preserved 'sacred forests' of Meghalaya, India. **Forest Science and Technology**. 7(4): 151–154
139. Bhagobaty RK and **Joshi SR** (2011) Metabolite profiling of endophytic fungal isolates of five ethno-pharmacologically important plants of Meghalaya, India. **Journal of Metabolomics and Systems Biology**. 2(2): 20-31
140. Bhagobaty RK and **Joshi SR** (2011) Multi-loci molecular characterization of endophytic fungi isolated from five medicinal plants of Meghalaya, India. **Mycobiology**, 39(2): 71-78
141. Pfoze NL, Kumar Y, Myrboh B, Bhagobaty RK and **Joshi SR** (2011) *In vitro* antibacterial activity of alkaloid extract from stem bark of *Mahonia manipurensis* Takeda. **Journal of Medicinal Plants Research**. 5(5), 859-86
142. Kumar R, Acharya C and **Joshi SR** (2011) Isolation and analyses of uranium tolerant *Serratia marcescens* strains and their utilization for aerobic uranium U(VI) bioadsorption. **Journal of Microbiology**. 49(4):568-574
143. Purusothaman KG, Bhattacharjee K, **Joshi SR** and Vasanthakumari R (2010) Comparative efficacies of three acid-fast staining techniques under field conditions for *Mycobacterium tuberculosis* in the Indian context. **The Internet Journal of Microbiology**. 4 (2)
144. Sarma B, Acharya C and **Joshi SR** (2010) Pseudomonads : a versatile bacterial group exhibiting dual resistance to metals and antibiotics. **African journal of Microbiology Research**. 4(25): 2828-2835.
145. Saikia P and **Joshi SR** (2010) Retail market poultry meats of North-east India : A microbiological survey for pathogenic microorganisms. **Research Journal of Microbiology**. 5(1) : 36-43
146. Devi LS, Khaund P and **Joshi SR** (2010) Thermostable  $\alpha$ -amylase from natural variants of *Bacillus* spp. Prevalent in eastern himalayan range. **African journal of Microbiology Research**. 4(23): 2534-2542

147. Bhagobaty RK, **Joshi SR** and Kumar R (2010) *Penicillium verruculosum* RS7PF: a root fungal endophyte associated with an ethno-medicinal plant of the indigenous tribes of eastern India. **African journal of Microbiology Research**. 4(9): 766-770.
148. **Joshi SR**, R Kumar, Saikia P, Bhagobaty RK and Thokchom S (2010) Impact of roadside pollution on microbial activities in sub-tropical forest soils of North-East India. **Research Journal of Environmental Sciences**, 4(3) : 280-287
149. Bhagobaty RK, Ghosh A and **Joshi SR** (2009) Degradation of non-petroleum based natural and synthetic oil by lipase producing fluorescent *Pseudomonas* spp isolated from petroleum based hydrocarbon saturated soils of shilling, Meghalaya, India. **Online Journal of Biotechnology Research** 1(3): 78-83
150. **Joshi SR**, Saikia P and Koijam K (2009) Characterization of microbial indicators to assess the health of degraded soil in Cherrapunjee, India-highest rainfall area of the world. **International Journal of Biotechnology & Biochemistry**. 5(4) 379-391
151. Sohliya I, Bhagobaty RK, Kumar R and **Joshi SR** ( 2009) *Tungrymbai*- traditional fermented soybean food of the ethnic tribes of Meghalaya. **Indian Journal of Traditional Knowledge**. 8(4): 559-561
152. Rapsang GF and **Joshi SR** (2009) Microbes in food: Hazards and regulating factors. **Agrobios** VII(12) 15-17
153. Bhagobaty RK and **Joshi SR** (2009) Promotion of seed germination of green gram and chick pea by *Penicillium verruculosum* RS&PF, a root endophytic fungus of *Potentilla fulgens* L. **Advanced Biotech**. VIII (07): 16-18
154. Bhagobaty RK, **Joshi SR** and Das RN ( 2008) Prediction of the microbial biodegradative pathway of organophosphorus pesticide Chlorpyrifos using the web based open access pathway prediction system of the University of Minnesota Biocatalysis/Biodegradation database. **Bioinformatics Trends** . 3(4) : 9-14
155. Kumar R, Acharya C and **Joshi SR** ( 2008) Metal tolerant Bacillus and Pseudomonas from uranium rich soils of Meghalaya. **Research Journal of Biotechnology** (Special Issue. Dec 2008) 345-350
156. Bhattacharjee A, Choudhury H, Maheshwari U and **Joshi SR** (2008) *In-silico* prediction of structural and functional aspects of a hypothetical protein of *Arabidopsis thaliana* (L) Heynh. **Advanced Biotech**.VII (06):14-18
157. Majaw S, Kurkalang S, **Joshi SR** and A Chatterjee (2008) Effect of *Clerodendron colebrokianum* walp.leaf extract on cold – restraint stress in mice. **Pharmacologyonline**. 2: 742-753.
158. Bhagobaty RK and **Joshi SR** (2008) DNA damage protective activity of the crude metabolites of

- endophytic fungi isolated from two ethno-pharmacologically important medicinal plants of the Khasi Hills of Meghalaya, India. **Pharmacologyonline**. 3: 882-888.
159. **Joshi SR**, Bhagobaty RK and Kumar R (2008). Microbial community on leaf surfaces of broad-leaved alder (*Alnus nepalensis* D.Don) and needle-leaved khasi pine (*Pinus kesiya* Royle Ex Gordon) as influenced by atmospheric dry deposition of roadside pollution In eastern Himalayas. **Research Journal of Environmental Sciences**.2(4) : 234-242
160. **Joshi SR** (2008). Influence of roadside pollution on phylloplane microbial community of *Alnus nepalensis* . **Revista de Biología Tropical**. 56(3) : 1521-29
161. Bhagobaty RK, **Joshi SR** and Malik A (2007). Microbial Degradation of Organophosphorous Pesticide: Chlorpyrifos (Mini-Review). **The Internet Journal of Microbiology**. Vol 4 No. 1
162. **Joshi SR**, Sharma GD and Mishra RR (1993). Effect of heavy metal accumulation on leaf surface microorganisms of sub-tropical pine (*Pinus kesiya*). **Tropical Ecology**. 34(2): 230-239.
163. **Joshi SR**, Sharma GD and Mishra RR (1993). Microbial enzyme activities related to litter decomposition near a highway in a sub-tropical forest of North-East India. **Soil Biology and Biochemistry**. 25(12). 1763-1770. doi:10.1016/0038-0717(93)90181-A
164. **Joshi SR**, Chauhan M, Sharma GD and Mishra RR (1991). Effect of deforestation on microbes, VAM fungi and their enzymatic activity in Eastern Himalaya. **Recent Researches in Ecology, Environment and Pollution**. 6: 141-152.

#### **Book Chapters: (42)**

1. **SR Joshi**, G.D.Sharma and R.R.Mishra (1991). Effect of disturbance on microbial population and their activities in forest soils at higher altitudes of Meghalaya. In: High Altitudes of Himalaya (Biogeography, Ecology & Conservation) (Eds. P.S.Pangtey & R.S. Rawal) Gyanodaya Prakashan, Nainital, pp.298-309
2. D Syiem, **SR Joshi** and MB Syiem (2004). Intellectual Property rights and North East India- Issues and relevance. In: Intellectual Property Rights. pp.145-149.
3. **SR Joshi** ( 2005) . Bioresource and Bioprospecting in NE India: Unlocking the treasure for socio-economic development of the region. In: Socio-Economic Development of India with special reference to NE India. Shillong College Academic Society pp.141-144.
4. R Kumar and **SR Joshi** (2008). Microbial ecology of the soil: Studying the diversity of microorganisms in the most complex of environments- A review. In: Advances in Applied Microbiology, Agrobios, Jodhpur, India. pp: 267-277

5. **SR Joshi** (2008) Relevance of microbial biosensors in environmental toxicity studies. In :Proceedings of National Seminar on toxicity of chemicals & their hazards with special reference to heavy metals. St.Edmund's College, Meghalaya (India), pp.81-86.
6. RK Bhagobaty, P Biswa, and **SR Joshi** (2009) Isolation of endophytic fungus from *Osbeckia stellata* Buch. Ham.ex D.Don, a medicinal plant of the Pine forests of Meghalaya, India. In: Biodiversity– Herbal Medicine, pp: 148-157. Akansha Publishing House, Darya Ganj, New Delhi, India.
7. RM Syiem, A Chatterjee, S Majaw and **SR Joshi** ( 2009). Study on the adaptogenic properties of *Clerodendron colebrrokianum* walp. On cold stress induced –mice. In: Biodiversity–Herbal Medicine, pp: 134-139. Akansha Publishing House, Darya Ganj, New Delhi, India
8. R Kumar and **SR Joshi** (2009). Probiotics: Indigenous fermented foods as a source of potential medicinal microbes.In: Biodiversity– Herbal Medicine, pp: 211-222. Akansha Publishing House, Darya Ganj, New Delhi, India.
9. Rakshak Kumar and **SR Joshi** ( 2009) Probiotics: Biotechnology in prolongation of life . In: Biotechnology Applications (eds CSK Mishra and Pascale Champagne). IK International Publishing House . India. Pp. 187-212
10. RK Bhagobaty and **SR Joshi** ( 2009) Endophytes: A biotechnological goldmine . **In:** Biotechnology Applications ( eds CSK Mishra and Pascale Champagne) IK International Publishing House . India. Pp. 300-308
11. **SR Joshi** (2010) Roadside pollution and microbial community of alder and khasi pine . In: Advances in Biotechnology and Microbiology ( Eds PR Jatkar, P parihar and L Parihar) . Agrobios ( India) pp.101-108
12. **SR Joshi** and RS Singh (1999). Comparative study on the production of biogas using different slurries in a miniature biogas production system. **In:** Proceedings of National Seminar on Pollution, Man & Environment. Pp. 87-91.
13. Nathaniel A Lyngwi and **SR Joshi** ( 2014) Economically important Bacillus and related genera: a mini review. **In:** Biology of useful plants and microbes. Narosa Publishing House, New Delhi, India pp 33-43.
14. Polashree Khaund and **SR Joshi** ( 2014) The *Gomphus* Paradox of Meghalaya: Wild Edible Fungus or a Poisonous Mushroom? In: Microbial Diversity and Biotechnology in Food Security ( Eds:R.N. Kharwar, R.S. Upadhyay, N.K. Dubey, Richa Raghuwanshi ) Pp 171-176 .DOI:10.1007/978-81-322-1801-2\_13. Springer Link
15. **SR Joshi**, Debajit Kalita, Rakshak Kumar, Macmillan Nongkhlaw, Pynskhem Bok Swer (2014) Metal–Microbe Interaction and Bioremediation. In: Radionuclide Contamination and Remediation

Through Plants (Eds Dharmendra Kumar Gupta, Clemens Walther) pp 235-251. DOI:10.1007/978-3-319-07665-2\_12 <http://link.springer.com/chapter/>

16. Debajit Kalita, Barnali Sarma and **SR Joshi**(2015) Lead(Pb) tolerant bacterial strains from uranium rich soil of Domiasiat in Meghalaya. In: Bioreview-National Perspectives and Sustainable Development” Morigaon College, Assam. pp 63-69.
17. Barnali Sarma and **SR Joshi** (2015) Environmental toxicity and the role of Pseudomonads in biodegradation of xenobiotics. *In: Biology, Biotechnology and Sustainable Development.* (Ed: H. Choudhury) Research India Publications, India pp. 41-61
18. **Joshi SR** and Biswas K(2015) Antioxidants in fermented Foods. In: Health Benefits of Fermented Foods and Beverages (Ed: J.P. Tamang), CRC Press. Pp 553-565.
19. Molins AC, Galvez A, **Joshi SR**, et al. ( 2016) Indigenous Fermented Foods of South Asia. *In: Indigenous Fermented Foods of South Asia* (Ed: V.K. Joshi). Taylor and Francis Group, LLC. Pp. 1-67.
20. Senapati AK, Ann A, **Joshi SR**, et al. (2016) Diversity of Indigenous Fermented Foods and Beverages of South Asia. *In: Indigenous Fermented Foods of South Asia* (Ed: V.K. Joshi). Taylor and Francis Group, LLC. Pp.69-106.
21. Kumari K, Pandey A, **Joshi SR**, et al. (2016) Indigenous Alcoholic beverages of South Asia. *In: Indigenous Fermented Foods of South Asia* (Ed: V.K. Joshi). Taylor and Francis Group, LLC. Pp. 501-596.
22. Rosma A, Singh A, **Joshi SR**, et al. (2016) Indigenous Fermented foods. *In: Indigenous Fermented Foods of South Asia* (Ed: V.K. Joshi). Taylor and Francis Group, LLC. Pp. 645-713.
23. **Joshi SR** and Biswas K (2017) Enterococci Prevalent in Processed Food Products: From Probiotics to Food Safety. In: Kalia V., Shouche Y., Purohit H., Rahi P. (eds) Mining of Microbial Wealth and MetaGenomics. Springer, Singapore . pp. 287-299. [https://doi.org/10.1007/978-981-10-5708-3\\_17](https://doi.org/10.1007/978-981-10-5708-3_17).
24. Bhattacharjee K and **Joshi SR** (2018) Lithic bacteria, a lesser known group in biomining arena. In: Microbial Cell Factories. (Eds: Deepansh Sharma, Baljeet Singh Saharan ) Taylor & Francis Group, CRC Press, Boca Raton, Florida, USA. pp 51-68
25. **Joshi SR** and Kalita D (2018) Biological, Chemical and Nanosorption Approaches in Remediation of Metal Wastes. In: Remediation Measures for Radioactively Contaminated Areas. (Eds: D.K. Gupta and A.Voronina) Springer Nature, Switzerland. Pp. 93-112.
26. Borthakur M and **Joshi SR** (2019) Wild Mushrooms as Functional Foods: The Significance of Inherent Perilous Metabolites. *In: New and Future Developments in Microbial Biotechnology and Bioengineering.* (Eds: VK Gupta & A Pandey) Elsevier , Netherlands. Pg 1-12 . DOI: <https://doi.org/10.1016/B978-0-444-63504-4.00001-3>

27. Banerjee S, Jha DK and **Joshi SR** (2019) Cave Microbiome for Human Welfare. *In: Satyanarayana T., Das S., Johri B. (eds) Microbial Diversity in Ecosystem Sustainability and Biotechnological Applications*. Springer, Singapore. pp. 3-30. [https://doi.org/10.1007/978-981-13-8487-5\\_1](https://doi.org/10.1007/978-981-13-8487-5_1)
28. **Joshi SR**, Bared D and Banerjee A (2019) Soil Microbiota and Sustainable *Jhum* Agroecosystem. *In: Satyanarayana T., Das S., Johri B. (eds) Microbial Diversity in Ecosystem Sustainability and Biotechnological Applications*. Springer, Singapore. pp 57-82. [https://doi.org/10.1007/978-981-13-8487-5\\_3](https://doi.org/10.1007/978-981-13-8487-5_3).
29. **Joshi SR** and Chettri Upashna (2019) Fungi in Hypogean Environment: Bioprospection Perspective. *In: Satyanarayana T, Deshmukh SK, Deshpande MV (eds) Advancing Frontiers in Mycology and Mycotechnology: Basic and Applied Aspects of Fungi*. Springer, Singapore pp. 539-562.
30. **Joshi SR**, Khongriah Welfareson and Biswas Koel (2020) Ethnic Fermented Foods and Beverages of Meghalaya. *In: J.P. Tamang (ed.) Ethnic Fermented Foods and Beverages of India: Science History and Culture*. Springer Nature Singapore Pte Ltd. pp. 421-434.
31. Nath Archana and **Joshi SR** (2020) Bioprospection of endophytic fungi associated with ethnoveterinary plants for novel metabolites. *In: VK Sharma, MP Shah, S Parmar and A Kumar (Eds). Fungi Bio-Prospects in Sustainable Agriculture, Environment and Nano-Technology. Volume 1: Fungal Diversity of Sustainable Agriculture* Academic Press, Elsevier, United Kingdom. pp. 375-399. <https://doi.org/10.1016/B978-0-12-821394-0.00015-9>.
32. Thabab S. and **Joshi S.R.** (2021) Plant growth promoting rhizobacteria from the perspectives of tea plantations and diseases. *In: HB Singh and Anukool Vaishnav (Eds). New and Future Developments in Microbial Biotechnology and Bioengineering*. Elsevier Amsterdam, Netherlands pp. 315-332. ISBN: 978-0-323-85163-3
33. Pun B. and **Joshi S.R.** (2022) Microbes as biomedical minifactories and medical product evaluation models. *In: PV Mohanan (Ed.) Biomedical Product and Materials Evaluation Standards and Ethics*. Elsevier WoodHead Publishing. United Kingdom. pp. 667-701.
34. Akoijam N. and **Joshi S.R.** (2022) Conservation Metagenomics: Understanding Microbiomes for Biodiversity Sustenance and Conservation. *In: A. Kumar et al. (eds.), Molecular Genetics and Genomics Tools in Biodiversity Conservation*, Springer Nature Singapore Ltd. [https://doi.org/10.1007/978-981-16-6005-4\\_3](https://doi.org/10.1007/978-981-16-6005-4_3)
35. Banerjee A. Barik S.K. and **Joshi S.R.** (2022) Bacilli and Sustainable *Jhum* Agrobiotechnology. *In: M. T. Islam et al. (eds.), Bacilli in Agrobiotechnology, Bacilli in Climate Resilient Agriculture and Bioprospecting*. Springer Nature Switzerland. [https://doi.org/10.1007/978-3-030-85465-2\\_11](https://doi.org/10.1007/978-3-030-85465-2_11)



36. Chanda P. and **Joshi S.R.** (2022) Understanding the Small World. **In:** ( P. Verma Ed.) The Microbes Industrial Microbiology and Biotechnology. Springer Nature Singapore Pte Ltd. pp. 1-62. <https://doi.org/10.1007/978-981-16-5214-1>. ISBN 978-981-16-5213-4 ISBN 978-981-16-5214-1 (eBook)
37. Akoijam N., Kalita D. and **Joshi S.R.** (2022) Bacteria and Their Industrial Importance. **In:** ( P. Verma Ed.) The Microbes Industrial Microbiology and Biotechnology. Springer Nature Singapore Pte Ltd . pp. 63-80. <https://doi.org/10.1007/978-981-16-5214-1>. ISBN 978-981-16-5213-4 ISBN 978-981-16-5214-1 (eBook)
38. Paul S. and **Joshi S.R.** (2022) Industrial Perspectives of Fungi. **In:** ( P. Verma Ed.) The Microbes Industrial Microbiology and Biotechnology. Springer Nature Singapore Pte Ltd . pp. 81- 106. <https://doi.org/10.1007/978-981-16-5214-1>. ISBN 978-981-16-5213-4 ISBN 978-981-16-5214-1 (eBook)
39. Chettri U., Rai A.K. Thabab S. and **Joshi S.R.** (2020) Production of Malt-Based Beverages. **In:** P.Verma (Ed.) The Microbes Industrial Microbiology and Biotechnology. Springer Nature Singapore Pte Ltd. pp. 279-306. <https://doi.org/10.1007/978-981-16-5214-1>. ISBN 978-981-16-5213-4 ISBN 978-981-16-5214-1 (eBook)
40. Joshi, S.R. and Baskar, S. (2022). Factors Affecting Biomineralization. **In:** Berenjian, A., Seifan, M. (eds) Mineral Formation by Microorganisms. Microbiology Monographs, vol 36. Springer, Cham. Pp. 283-314 [https://doi.org/10.1007/978-3-030-80807-5\\_8](https://doi.org/10.1007/978-3-030-80807-5_8)
41. Pun, B., Nongkhlaw, F.M.W. and Joshi S.R. (2022) Metaomics Technologies in Understanding Ethnomedicinal Plants and Endophyte Microbiome. **In:** J. Sahu, A. Vaishnav and HB Singh (Eds) . Plant-Microbe Interactions, harnessing Next-Generation Molecular technologies for Sustainable Agriculture CRC Press (Taylor & Francis Group). DOI: 10.1201/9781003171416. ISBN: 9781003171416 (eBook)
42. Joshi, S.R. and Kalita, D. (2022) Bioderived and bioconjugated materials for remediation of heavy metals and dyes from waste water. **In:** Recent Trends and Innovations in Sustainable Treatment Technologies for Heavy Metals, Dyes and Other Xenobiotics. (Ed: Biswanath Bhunia & Muthusivaramapandian Muthuraj). Bentham Science Publishers Pte Ltd. Singapore . ISBN (online) : 978-981-5049-72-5.
43. Chettry, U., Upadhaya, S., Nongbet, A., Chrungoo, N.K., **Joshi, S.R.** (2023). Exploring Plant-Microbe Interaction Through the Lens of Genome Editing. **In:** Verma, P. (eds) Industrial Microbiology and Biotechnology. Springer, Singapore. [https://doi.org/10.1007/978-981-99-2816-3\\_8](https://doi.org/10.1007/978-981-99-2816-3_8).

44. Pun, B., **Joshi, S.R.** (2023). Frontiers in Fungal Endophytes Associated with Medicinal Orchids. **In:** Verma, P. (eds) Industrial Microbiology and Biotechnology. Springer, Singapore. [https://doi.org/10.1007/978-981-99-2816-3\\_11](https://doi.org/10.1007/978-981-99-2816-3_11).
45. Joshi, B., Jena, S.N., **Joshi, S.R.**, Bhau, B.S. (2023). Recent Advances in PGPRs and Their Application in Imparting Biotic and Abiotic Stress Tolerance in Plants. **In:** Verma, P. (eds) Industrial Microbiology and Biotechnology. Springer, Singapore. [https://doi.org/10.1007/978-981-99-2816-3\\_15](https://doi.org/10.1007/978-981-99-2816-3_15).
46. Chanda, P., Pun, B., **Joshi, S.R.** (2023). Microbial Diversity for Agricultural Productivity. **In:** Verma, P. (eds) Industrial Microbiology and Biotechnology. Springer, Singapore. [https://doi.org/10.1007/978-981-99-2816-3\\_18](https://doi.org/10.1007/978-981-99-2816-3_18).
47. Paul, S., Ingti, B., **Joshi, S.R.** (2024) Utility of Endophytes for the Enhancement of Biofuel Production. **In:** M. Shah and D. Deka (Eds) Emerging Sustainable Technologies for Biofuel Production. Environmental Science and Engineering. Springer Nature Switzerland [https://doi.org/10.1007/978-3-031-52167-6\\_13](https://doi.org/10.1007/978-3-031-52167-6_13).
48. Nirmala, A. and Joshi, S.R. (2024) Genome editing and genetically engineered bacteria for bioremediation of heavy metals. **In:** Genome Editing in Bacteria (Part 2). P.M. Halami and A Sundararaman (Eds). Bentham Science Publishers. Pp.184-221
49. Mohan, V.K., Joshi, S.R. (2024). Mycorrhizal Fungi as Ecofriendly Interventions for Crop Productivity. In: Verma, P. (eds) Industrial Microbiology and Biotechnology. Springer, Singapore. [https://doi.org/10.1007/978-981-97-1912-9\\_26](https://doi.org/10.1007/978-981-97-1912-9_26).
50. Khongriah, W., Joshi, S.R. (2024). Probiotic Bacterial Enzymes and Cardiovascular Diseases. In: Verma, P. (eds) Industrial Microbiology and Biotechnology. Springer, Singapore. [https://doi.org/10.1007/978-981-97-1912-9\\_12](https://doi.org/10.1007/978-981-97-1912-9_12).

**Books Authored:**

1. **SR Joshi** and N Joshi (1999): Man & His Environment. A text book for Degree Course. Published by Gautam Bros. Shillong. 1999 pp. 132
2. **SR Joshi:** Health Education.(1993) A text book for high school . Published by Gautam Bros. Shillong. 1993. pp.202
3. **SR Joshi** and SP Adhikari (2000): Paryavaran Adhyan – Part I A Text Book on Environmental Studies for Class I and Class II. . Published by Text Book Committee Shillong, Meghalaya. Recommended by Meghalaya & Mizoram Board of School Education.pp. 87.
4. **SR Joshi** and SP Adhikari (2000): Paryavaran Adhyan – Part II A Text Book on Environmental Studies for Class I and Class II. . Published by Text Book

Committee Shillong, Meghalaya. Recommended by Meghalaya & Mizoram Board of School Education. pp. 89

5. **SR Joshi** and SP Adhikari (2001): ParyavaranAdhyan – Part III. A Text Book on Environmental Studies for Class III and Class IV. Published by Text Book Committee Shillong, Meghalaya. Recommended by Meghalaya & Mizoram Board of School Education..pp. 98.
6. **SR Joshi** and SP Adhikari (2001): Paryavaran Adhyan – Part IV. A Text Book on Environmental Studies for Class III and Class IV. Published by Text Book Committee Shillong, Meghalaya. Recommended by Meghalaya & Mizoram Board of School Education. pp.158
7. **SR Joshi** (2005): The Teaching of Science. A reference book for science teachers and B.Ed trainees Courses. Published by APH Publishing Corporation, New Delhi,. pp. 383
8. **SR Joshi** (2006): Biopesticides: A Biotechnological Approach. A reference book on Biopesticides. Published by New Age International(P) Limited, New Delhi.. pp.103
9. **SR Joshi** (2007) Microbes: Redefined Personality. Published by APH Publishing Corporation. Ansari Road, New Delhi. pp 236.
10. **SR Joshi** and SP Adhikari (2008): Art of Healthy and Productive Living. Text Book for Class II. Book Palace, Shillong. pp 100
11. **SR Joshi** and SP Adhikari (2008): Art of Healthy and Productive Living. Text Book for Class III. Book Palace, Shillong. pp 63
12. **SR Joshi** and SP Adhikari (2008): Art of Healthy and Productive Living. Text Book for Class II. Book Palace, Shillong. pp 62.
19. **Papers Presented in conferences:** International (21) : National (50).
20. **Patents : 01 ( Applied); (01)Published)**

**21. Any other:**

**GENOMICS MARKER SEQUENCES SUBMITTED TO GENBANK DATABASES ::**

**Sl. NO: : Accession Number : Organism Name: : Authors: Marker Gene: Partial/Full: Base Pair length**

**JN230520:***Staphylococcus equorum* CM5: Joshi,S.R., Bhattacharjee,K. and Bawitlung,L.:16S rRNA : Partial: >1300bp

**JN230521:** *Enterobacter* sp.MF-1: : Joshi,S.R., Bhattacharjee,K. and Bawitlung,L.:16S rRNA: Partial :>1300bp

**JN230522:** *Bacillus subtilis* MF-2: : Joshi,S.R., Bhattacharjee,K. and Bawitlung,L.: 16S rRNA:Partial :>1300bp

**JN408703:** *Bacterium* PRI5: Joshi,S.R., Bhattacharjee,K. and Banerjee,S.: 16S rRNA: Partial :>1300bp

**JN408704:** *Bacterium* LM5 : Joshi,S.R., Bhattacharjee,K. and Banerjee,S. : 16S rRNA: Partial : >1300bp

**JN408705:** *Streptomyces* sp. RH4: : Joshi,S.R., Bhattacharjee,K. and Banerjee,S.: : 16S rRNA: Partial : >1300bp

**JN408706:** *Streptomyces vinaceus* strain LANG-3: Joshi,S.R., Bhattacharjee,K. and Banerjee,S.: 16S rRNA:Partial : >1300bp

**JN408707:** *Kitasatospora* sp. LANG-2: Joshi,S.R., Bhattacharjee,K. and Banerjee,S.:16S rRNA: Partial:>1300bp

**JN408708:** *Nocardia aobensis* strain AM-1: Joshi,S.R., Bhattacharjee,K. and Banerjee,S.:16S rRNA: Partial : >1300bp  
**JF827349:** *Streptomyces aureofaciens* strain GL2: Joshi,S.R., Bhattacharjee,K. and Banerjee,S.: 16S rRNA:Partial : >1300bp  
**JF827350:***Streptomyces chattanoogensis* strain GP4:Joshi,S.R., Bhattacharjee,K. and Banerjee,S.:16S rRNA: >1300bp  
**JF827351:** *Streptomyces niveoruber* strain MA1: Joshi,S.R., Bhattacharjee,K. and Banerjee,S.:16S rRNA:Partial :>1300bp  
**JF827352:** *Streptomyces cacaoi* subsp. *asoensis* strain MB2:Joshi,SR,Bhattacharjee,K and Banerjee,S:16S rRNA: 1300bp  
**JF827353:** *Streptomyces galbus* strain NG4: Joshi,S.R., Bhattacharjee,K. and Banerjee,S.:16S rRNA : Partial : >1300bp  
**JF827354:** *Streptomyces griseoruber* strain NG5: Joshi,S.R., Bhattacharjee,K. andBanerjee,S.: 16S rRNA: Partial :>1300bp  
**KU258198:** *Actinokineospora bangkokensis* AL1: Bhattacharjee,K. and Joshi,S.R.:16S rRNA:Partial : >1300bp  
**KU258199:** *Actinomadura* sp. AL2: Bhattacharjee,K. and Joshi,S.R.:16S rRNA: Partial : >1300bp  
**KU258200:** *Actinomadura scrupuli* AL3: Bhattacharjee,K. and Joshi,S.R.:16S rRNA: Partial :>1300bp  
**KU258201:** *Actinoplanes nipponensis* AL4: Bhattacharjee,K. and Joshi,S.R.:16S rRNA: : Partial:>1300bp  
**KU258202:** *Actinopolyspora righensis* AL5: Bhattacharjee,K. and Joshi,S.R.: 16S rRNA : Partial : >1300bp  
**KU258203:** *Actinopolyspora saharensis* AL6 : Bhattacharjee,K. and Joshi,S.R.: 16S rRNA : Partial : > 1300bp  
**KU258204:** *Actinospica acidiphila*AL7 : Bhattacharjee,K. and Joshi,S.R.: 16S rRNA: Partial : > 1300bp  
**KU258205:** *Angustibacter luteus* AL8 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258206:***Arthrobacter* sp. AL9 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258207:** *Arthrobacter agilis* AL10 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258208:** *Arthrobacter* sp. AL11 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258209:***Auraticoccus monumenti* AL12Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258210:** *Beutenbergia cavernae* AL13 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258211:** *Blastococcus jejuensis* AL14 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > 1300bp  
**KU258212:** *Blastococcus saxosidens* AL15 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258213:** *Blastococcus* sp. AL16 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258214:** *Conexibacter woesei* AL17 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > : 1300bp  
**KU258215:** *Dietzia natronolimnaea* AL18 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258216:** *Geodermatophilus* sp. AL19 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258217:** *Geodermatophilus siccatus* AL20 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > 1300bp  
**KU258218:***Geodermatophilus tzadiensis* AL21 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > 1300bp  
**KU258219:** *Granulicoccus phenolivorans* AL22 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > 1300bp  
**KU258220:** *Kibdelosporangium aridum* AL23 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > 1300bp  
**KU258221:** *Kitasatospora cheerisanensis* AL24 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258222:** *Micromonospora endolithica* AL25 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > : 1300bp  
**KU258223:** *Micromonospora* sp. AL26 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > : 1300bp  
**KU258224:** *Modestobacter marinus* AL27 : Bhattacharjee,K. and Joshi,S.R. : : 16S rRNA : Partial : >1300bp  
**KU258225:** *Nocardioides albertanoniae* AL28 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258226:** *Nocardioides* sp. AL29 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258227:** *Pseudokineococcus marinus* AL30 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258228:** *Pseudonocardia antarctica* AL31 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > 300bp  
**KU258229:** *Pseudonocardia antitumoralis* AL32 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258230:** *Pseudonocardia sediminis* AL33 : Bhattacharjee,K. and Joshi,S.R. : : 16S rRNA : Partial : >1300bp  
**KU258231:** *Rhodococcus baikonurensis* AL34 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : >1300bp  
**KU258232:** *Rhodococcus canchipurensis* AL35 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial : > 1300bp

**KU258233:** *Rhodococcus kropsnedtii* AL37 : Bhattacharjee,K. and Joshi,S.R : 16S rRNA ; Partial : > 1300bp  
**KU761254:** *Rhodococcus jostii* AL36 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258234:** *Rhodococcus nanhaiensis* AL38 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258235:** *Rubrobacter radiotolerans* AL39 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258236:** *Saccharothrix algeriensis* AL40 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258237:** *Saccharothrix lopnurensis* AL41 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258238:** *Sporichthya polymorpha* AL42 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258239:** *Sporichthya* sp. AL43 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258240:** *Streptoalloteichus tenebrarius* AL44 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258241:** *Streptomyces aureofaciens* AL45 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258242:** *Streptomyces avermitilis* AL46 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258243:** *Streptomyces gramineus* AL47 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :> 1300bp  
**KU258244:** *Streptomyces graminisoli* AL48 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258245:** *Streptomyces hypoliticus* AL49 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258246:** *Streptomyces* sp. AL50 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258247:** *Streptomyces* sp. AL51 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258248:** *Thermopolyspora flexuosa* AL52 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258249:** *Tsukamurella paurometabola* AL53 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258250:** *Streptomyces luteireticuli* CB4 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258251:** *Streptomyces nigrogriseolus* LT1 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258252:** *Acinetobacter guangdongensis* BL1 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258253:** *Acinetobacter johnsonii* BL2 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258254:** *Amaricoccus tamworthensis* BL3 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258255:** *Amaricoccus tamworthensis* BL4 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258256:** *Anaerococcus octavius* BL5 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :> 1300bp  
**KU258257:** *Bacillus cereus* BL6 : : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258258:** *Fictibacillus barbaricus* BL7 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258259:** *Bacillus drentensis* BL8 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258260:** *Bacillus megaterium* BL9 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258261:** *Bacillus simplex* BL10 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258262:** *Bacillus niacini* BL11 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258263:** *Belliella pelovolcani* BL12 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258264:** *Desulfomicrobium macestii* BL13 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258265:** *Desulfovibrio alaskensis* BL14 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258266:** *Dyadobacter alkalitolerans* BL15 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258267:** *Emticicia sediminis* BL16 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258268:** *Candidatus Entotheonella palauensis* BL17 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258269:** *Flexibacter flexilis* BL18 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258270:** *Massilia timonae* BL19 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258272:** *Methylocystis bryophila* BL21 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :> 1300bp  
**KU258273:** *Microbulbifer arenaceous* BL22 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :> 1300bp  
**KU258274:** *Nitrospira moscoviensis* BL23 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :> 1300bp

**KU258275:** *Nordella oligomobilis* BL24 : : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :> : 1300bp  
**KU258276:** *Novosphingobium subterraneum* BL25 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258277:** *Pantoea agglomerans* BL26 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258278:** *Paracraurococcus ruber* BL27 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258279:** *Pseudomonas migulae* BL28 : : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :> 1300bp  
**KU258280:** *Pseudomonas xinjiangensis* BL29 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258281:** *Psychrobacter aestuarii* BL30 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258282:** *Rheinheimera perlucida* BL31 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258283:** *Rhodoplanes elegans* BL32 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : : Partial :>1300bp  
**KU258284:** *Serratia ureilytica* BL33 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258285:** *Shewanella* sp. BL34 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258286:** *Variovorax paradoxus* BL35 : : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258287:** *Bacillus aryabhatai* DG12 : : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : : Partial :>1300bp  
**KU258288:** *Bacillus cereus* BK4 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258289:** *Bacillus cereus* DG1 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258290:** *Bacillus* sp. DT21 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258291:** *Bacillus pseudomycooides* DT11 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**110.KU761252:** *Bacillus* sp. AM2 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU761253:** *Bacillus* sp. CB2 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258292:** *Bacillus subtilis* GP2 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258293:** *Burkholderiacenocepacia* DG11 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258294:** *Burkholderia* sp. DG7 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**KU258295:** *Pseudomonas* sp. BM1 : Bhattacharjee,K. and Joshi,S.R. : 16S rRNA : Partial :>1300bp  
**HQ728330:** *Lactococcus lactis* : Sharmila Thokchom and SR Joshi : : 16S rRNA : Partial : : 1444bp :  
**HQ728331:** *Weissella hellenica*: Sharmila Thokchom and SR Joshi : 16S rRNA : Partial : 1467bp :  
**HQ728333:** *Lactobacillus plantarum*: Sharmila Thokchom and SR Joshi : 16S rRNA : Partial : 1460bp :  
**HQ728324:** *Enterococcus durans* : Sharmila Thokchom and SR Joshi : 16S rRNA : Partial : 1470bp :  
**JN104057:** *Enterococcus casseliflavus* : : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1323bp  
**JN029837:** *Vagococcus lutrae*: SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1357bp :  
**JN029833:** *Vagococcus fluvialis*: SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1306bp :  
**JF827598:** *Weissella thailandensis*: SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1467bp :  
**HQ728335:** *Lactobacillus curvatus*: Sharmila Thokchom and SR Joshi : 16S rRNA : Partial : 1466bp :  
**JN029838:** *Lactococcus garvieae* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1338bp :  
**HQ728336:** *Lactococcus lactis* : : Sharmila Thokchom and SR Joshi : : 16S rRNA : Partial : : 1453bp :  
**HQ728325:** *Vagococcus lutrae*: Sharmila Thokchom and SR Joshi : : 16S rRNA : Partial : : 1503bp :  
**JN029835:** *Staphylococcus equorum* : Sharmila Thokchom and SR Joshi : 16S rRNA : : Partial : 1268bp :  
**HQ728328:** *Staphylococcus cohnii* : Sharmila Thokchom and SR Joshi : 16S rRNA : Partial : 1455bp :  
**JN104059:** *Staphylococcus sciuri* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1360bp :  
**JN104058:** *Staphylococcus lentus*: SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1420bp :  
**HQ728327:** *Bacillus tequilensis* : : Sharmila Thokchom and SR Joshi : 16S rRNA : Partial : 1471bp :  
**HQ728329:** *Bacillus methylotrophicus* : Sharmila Thokchom and SR Joshi : 16S rRNA : Partial : : 1463bp :  
**JN104061:** *Rummeliibacillus stabekisii* : : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1341bp :

**JN029834:** *Corynebacterium stationis* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1002bp :  
**JN029832:** *Proteus mirabilis* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : : 1017bp :  
**JQ770189:** *Vagococcus fluvialis* : SR Joshi and Sharmila Thokchom : : 16S rRNA : Partial : 1100bp :  
**JQ770190:** *Vagococcus carniphilus* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1052bp :  
**JQ770191:** *Vagococcus fluvialis* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1372bp :  
**JQ770192:** *Trichococcus flocculiformis* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1322bp :  
**JQ770193:** *Trichococcus patagoniensis* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1085bp :  
**JQ770194:** *Proteus mirabilis* : SR Joshi and Sharmila Thokchom : 16S rRNA : : Partial : 1377bp :  
**JQ770195:** *Enterococcus casseliflavus* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : : 1318bp :  
**HQ728326:** *Bacillus tequilensis* : : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1438bp :  
**HQ728332:** *Lactococcus lactis* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1441bp :  
**HQ728334:** *Lactobacillus pentosus* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1461bp :  
**JN029831:** *Enterococcus canis* : : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1339bp :  
**JN029836:** *Staphylococcus equorum* : SR Joshi and Sharmila Thokchom : 16S rRNA : : Partial : 1227bp :  
**JN104056:** *Staphylococcus lentus* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1380bp :  
**JN104060:** *Enterococcus faecium* : SR Joshi and Sharmila Thokchom : 16S rRNA : Partial : 1265bp :  
**KM282281:** *Formitopsis ostreiformis* : M Borthakur, and SR Joshi : : ITS : partial : 788bp  
**KM282282:** *Russula foetens* : M Borthakur and SR Joshi : ITS : partial : 801bp  
**KM282283:** *Mycena galericulata* : M Borthakur and SR Joshi : ITS : partial : 640bp  
**KM282284:** *Hypholoma fasciculare* : M Borthakur and SR Joshi : ITS : partial : 644bp  
**KM282285:** *Panus conchatus* : M Borthakur and SR Joshi : ITS : partial : 583bp  
**KM282286:** *Galerina* sp. : M Borthakur and SR Joshi : ITS : partial : 795bp  
**KM282287:** *Lactifluus glaucescens* : M Borthakur and SR Joshi : ITS : partial : 709bp  
**KM282288:** *Trichaptum bifforme* : M Borthakur and SR Joshi : ITS : : partial : 759bp  
**KP843880:** *Russula variata* : M Borthakur and SR Joshi : ITS : partial : 765bp  
**KP843881:** *Campanophyllum proboscideum* : M Borthakur, and SR Joshi : ITS : partial : 501bp  
**KP843882:** *Trichaptum bifforme* : M Borthakur and SR Joshi : ITS : partial : 605bp  
**KP843883:** *Baorangia pseudocalopus* : M Borthakur and SR Joshi : ITS : partial : 603bp  
**KP843884:** *Echinoderma asperum* : M Borthakur and SR Joshi : ITS : partial : 725bp  
**KP877447:** *Micromphale foetidum* : M Borthakur and SR Joshi : ITS : partial : 871bp  
**KM983609:** *Lentinus tuber-regium* : AR Das, AK Saha, P Das, SR Joshi and M Borthakur : ITS : partial : 604bp  
**KM983610:** *Microcybe gigantean* : AR Das, AK Saha, P Das, SR Joshi and M Borthakur : ITS : partial : 567bp  
**KX831664:** *Trichoderma strigosellum* : M Borthakur, J Gogoi, and SR Joshi : ITS : partial : 573bp  
**KX831667:** *Ganoderma australe* : M Borthakur, S Sangma, and SR Joshi : ITS : partial : 506bp  
**KX011029:** *Pseudomonas* sp. : D Kalita and SR Joshi : 16S rRNA: full : 1493bp  
**KX831665:** *Penicillium citrinum* : D. Bareh, D Patra and S.R. Joshi : ITS : partial : 580bp  
**KX831666** : *Myrothecium verrucaria* D. Bareh, D Patra and S.R. Joshi : ITS : partial : 568bp  
**JN600358** : *proteobacterium* : Kumar R, Joshi SR : 16S rRNA : Partial : -285bp  
**JN600359** : *Acidobacteria bacterium* : Kumar R, Joshi SR : 16S rRNA : Partial : -278bp  
**JN600360** : *proteobacterium* : : Kumar R, Joshi SR : 16S rRNA : partial : -285bp  
**JN600361** : *proteobacterium* : : Kumar R, Joshi SR : 16S rRNA : partial : -285bp  
**JN600362.1** : *proteobacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -285bp

JN600363.1 : *Acidobacteriabacterium* : : 16SrRNA : partial : -285bp  
JN600364.1 : *proteobacterium* : Kumar R and JoshiSR : 16SrRNA : partial :  
JN600365.1 : *Acidobacteriabacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -285bp  
JN600366.1 : *Acidobacteriabacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -285bp  
JN600367.1 : *Firmicutesbacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -285bp  
JN600368.1 : *proteobacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -286bp  
JN600369.1 : *proteobacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -286bp  
JN600370.1 : *Acidobacteriabacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -274bp  
JN600371.1 : *proteobacterium* : KumarR and Joshi SR : 16SrRNA : partial : -285bp  
JN600372.1 : *proteobacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -285bp  
JN600373.1 : *proteobacterium* : Kumar R and Joshi SR : 16SrRNA : partial : -286bp  
JN600374.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -290bp  
JN600375.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -282bp  
JN600376.1 : *Firmicutesbacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -256bp  
JN600377.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -286bp  
JN600378.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -286bp  
JN600379.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -285bp  
JN600380.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -286bp  
JN600381.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -224bp  
JN600382.1 : *Chloroflexibacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -285bp  
JN600383.1 : *Acidobacteriabacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -285bp  
JN600384.1 : *Acidobacteriabacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -285bp  
JN600385.1 : *Acidobacteriabacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -286bp  
JN600386.1 : *proteobacterium* : Kumar R and Joshi SR: 16SrRNA : partial : -286bp  
JN600386.1 : *Proteobcaterium* : Kumar R and Joshi SR : 16S rRNA : partial : -285bp  
JN600387.1 : *Acidobacteria bacterium* : Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600388.1 : *Proteobcaterium*: Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600389.1 : *Acidobacteria bacterium* : Kumar R and Joshi SR : 16S rRNA : partial : -285bp  
JN600390.1 : *Verrucomicrobium* sp. : Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600391.1 : *Proteobcaterium* : Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600392.1 : *Acidobacteria bacterium* : Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600393.1 : *Acidobacteria bacterium* : Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600394.1 : *Acidobacteria bacterium* : Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600395.1 : *Proteobcaterium*: Kumar R and Joshi SR: 16S rRNA : partial : -285bp  
JN600396.1 : *Proteobcaterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600397.1 : *Actinobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -286bp  
JN600398.1 : *Firmicutes bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600399.1 : *Proteobcaterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600400.1 : *Proteobcaterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600401.1 : *Firmicutes bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600402.1 : *Firmicutes bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600403.1 : *Proteobcaterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp



JN600404.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600405.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600406.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600407.1 : *Chloroflexi bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -283bp  
JN600408.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600409.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600410.1 : *Firmicutes bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600411.1 : *Actinobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600412.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600413.1 : *Actinobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600414.1 : *Actinobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600415.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600416.1 : *Verrucomicrobium* sp. : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600417.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600418.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600419.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600420.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600421.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600422.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600423.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600424.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -283bp  
JN600425.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -283bp  
JN600426.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -288bp  
JN600427.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -283bp  
JN600428.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -283bp  
JN600429.1 : *Chlorobi bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600430.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600431.1 : *Firmicutes bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600432.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600433.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -290bp  
JN600434.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600435.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600436.1 : *Firmicutes bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600437.1 : *Firmicutes bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -285bp  
JN600438.1 : *Proteobacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : -264bp  
JN600439.1 : *Acidobacteria bacterium* : Kumar R, and Joshi SR : 16S rRNA : partial : 264bp  
JX040437 : *Sphingobacterium kitahiroshimense* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
JX040438 : *Bacillus* sp. : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
JX040439 : *Pseudomonas agri* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
JX040440 : *Sphingobacterium faecium* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
JX040441 : *Achromobacter xylosoxidans* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
JX040442 : *Iodobacter fluviatilis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500

**JX040443** : *Bacillus cereus* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX040444** : *Pseudomonas* sp. : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX040445** : *Pseudomonas agri* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX040446** : *Lysinibacillus parvivoronicapiens* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX040447** : *Bacillus amyloliquefaciens* subsp. *Amyloliquefaciens* : S.R.Joshi & S.Banerjee : 16S rRNA : ~1500  
**JX144942** : *Kocuria rosea* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144943** : *Lysinibacillus macroides* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144944** : *Pseudomonas agri* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144945** : *Pseudomonas gessardii* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144946** : *Pseudomonas vranovensis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144947** : *Pseudomonas chlororaphis* subsp. *Aurantiaca* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144948** : *Pseudomonas taiwanensis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144949** : *Staphylococcus saprophyticus* subsp. *bovis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144950** : *Acinetobacter johnsonii* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144951** : *Bacillus vallismortis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144952** : *Pseudomonas mosselii* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144953** : *Bacillus subtilis* subsp. *Inaquosorum* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144954** : *Kurthia gibsonii* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144955** : *Bacillus vallismortis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144956** : *Aeromonas hydrophila* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144957** : *Flavobacterium chungangense* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144958** : *Staphylococcus equorum* subsp. *Equorum* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144959** : *Pseudomonas monteilii* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX144960** : *Pseudomonas alcaligenes* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX298811** : *Ensifer adhaerens* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JX298812** : *Bacillus halodurans* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**KF515731** : *Bacillus thuringiensis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**KF515732** : *Bacillus circulans* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**KF515733** : *Paenibacillus massiliensis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**KF515734** : *Brevibacterium frigoritolerans* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**KF515735** : *Bacillus isronensis* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**KF515736** : *Bacillus cereus* : S.R.Joshi & S.Banerjee : 16S rRNA : Partial : ~1500  
**JN408709** : *Beauveria* sp. : Joshi,S.R. and Nath,A. : 18S rRNA : partial : 746 bp  
**JN408710** : *Eladia* sp. : Joshi,S.R. and Nath,A. : 18S rRNA : partial : 747bp  
**JN408711** : *Bulgaria* sp. : Joshi,S.R. and Nath,A. : 18S rRNA : partial : 666bp  
**JN408712** : *Glomus* sp. : Joshi,S.R. and Nath,A. : 18S rRNA : partial : 699bp  
**JN408713** : *Penicillium* sp. : Joshi,S.R. and Nath,A. : 18S rRNA : partial : 559bp  
**JN247756** : *Phomopsis* sp. : Joshi,S.R., Nath,A. and Devi,L.S. : 18S rRNA : partial : 623bp  
**JQ256456** : *Colletotrichum gloeosporioides* : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : partial : 521bp  
**JQ256457** : *Colletotrichum gloeosporioides* : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : partial : 541bp  
**JQ256458** : *Colletotrichum gloeosporioides* : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : partial : 514bp  
**JQ256459** : *Penicillium* sp. : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : partial : 659bp

**JQ256460** : *Colletotrichum gloeosporioides* : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : partial : 586bp  
**JQ256461** : *Colletotrichum* sp. : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : Partial : 661bp  
**JQ256462** : *Colletotrichum* sp. : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : Partial : 641bp  
**JQ256463** : *Aspergillus awamori* : Joshi,S.R., Das,S. and Nath,A. : 18S rRNA : Partial : 616bp  
**KF928279** : *Epicoccum sorghinum* : Joshi,S.R. and Nath,A. : ITS : Partial : 446bp  
**KF928280** : *Phomopsis asparagi* : Joshi,S.R. and Nath,A. : ITS : Partial : 552bp  
**KF928281** : *Colletotrichum gloeosporioides* : Joshi,S.R. and Nath,A. : ITS : Partial : 553bp  
**KF928284** : *Colletotrichum gloeosporioides* : Joshi,S.R. and Nath,A. : ITS : Partial : 552bp  
**KM282291** : *Colletotrichum gloeosporioides* : Joshi,S.R. and Nath,A. : ITS : Partial : 554bp  
**KF928283** : *Byssochlamys spectabilis* : Joshi,S.R. and Nath,A. : ITS : Partial : 677bp  
**KF928286** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : ITS : Partial : 533bp  
**KF928287** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : ITS : Partial : 534bp  
**KF928288** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : ITS : Partial : 534bp  
**KF928292** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : ITS : Partial : 535bp  
**KF928289** : *Calonectria eucalypti* : Joshi,S.R. and Nath,A. : ITS : Partial : 522bp  
**KF928290** : *Calonectria eucalypti* : Joshi,S.R. and Nath,A. : ITS : Partial : 518bp  
**KF928285** : *Xylaria* sp. : Joshi,S.R. and Nath,A. : ITS : Partial : 556bp  
**KF928291** : *Aspergillus niger* : Joshi,S.R. and Nath,A. : ITS : Partial : 723bp  
**KF928293** : *Colletotrichum acutatum* : Joshi,S.R. and Nath,A. : ITS : Partial : 561bp  
**KM282289** : *Glomerella magna* : Joshi,S.R. and Nath,A. : ITS : Partial : 547bp  
**KM282290** : *Talaromyces stollii* : Joshi,S.R. and Nath,A. : ITS : Partial : 563bp  
**KP178686** : *Epicoccum sorghinum* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 598bp  
**KP178687** : *Phomopsis asparagi* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 601p  
**KP178688** : *Colletotrichum gloeosporioides* : Joshi,S.R. and Nath,A. : (PKS) : Partial cds : 642bp  
**KP178689** : *Colletotrichum gloeosporioides* : Joshi,S.R. and Nath,A. : (PKS) : Partial cds : 598bp  
**KP178690** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : PKS: Partial cds : 318bp  
**KP178691** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 568bp  
**KP178692** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 565bp  
**KP178693** : *Calonectria eucalypti* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 655bp  
**KP178694** : *Calonectria eucalypti* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 628bp  
**KP178695** : *Aspergillus niger* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 649bp  
**KP178696** : *Corynespora cassicola* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 631bp  
**KP178697** : *Colletotrichum acutatum* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 329bp  
**KP178698** : *Talaromyces stollii* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 666bp  
**KP178699** : *Colletotrichum gloeosporioides* : Joshi,S.R. and Nath,A. : PKS : Partial cds : 583bp  
**JN660056** : *Klebsiella variicola* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,340bp  
**JN660057** : *Staphylococcus simulans* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,335bp  
**JN660058** : *Enterococcus faecalis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,404bp  
**JN660060** : *Staphylococcus gallinarum* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,397bp  
**JX026015** : *Vagococcus carniphilus* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,475bp  
**JX026016** : *Enterococcus saccharolyticus* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,473bp  
**JX026017** : *Vagococcus fluvialis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,472bp

**JX026018** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,469bp  
**JX026019** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,472bp  
**JX026020** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,475bp  
**JX026021** : *Vagococcus carniphilus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,474bp  
**JX026022** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,476bp  
**JX026023** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,472bp  
**JX026024** : *Vagococcus carniphilus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,479bp  
**JX026025** : *Enterococcus lactis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,469bp  
**JX026026** : *Vagococcus carniphilus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,473bp  
**JX026027** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,477bp  
**JX026028** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,468bp  
**JX026029** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,470bp  
**JX026030** : *Vagococcus carniphilus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,469bp  
**JX026031** : *Vagococcus fluvialis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,471bp  
**JX026032** : *Bacillus siamensis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,465bp  
**JX026033** : *Leuconostoc holzapfelii* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,465bp  
**JX026035** : *Leuconostoc holzapfelii* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,464bp  
**JX026036** : *Leuconostoc holzapfelii* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,465bp  
**JX026037** : *Leuconostoc lactis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,466bp  
**JX026009** : *Brevundimonas Vesicularis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,374bp  
**JX026010** : *Sphingomonas dokdonensis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,396bp  
**JX026011** : *Brevundimonas nasdae* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,378bp  
**JX026012** : *Acetobacter indonesiensis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,409bp  
**JX026013** : *Acetobacter indonesiensis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,408bp  
**JX026014** : *Acetobacter indonesiensis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,412bp  
**JX026034** : *Leuconostoc lactis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,469bp  
**JN660075** : *Staphylococcus epidermidis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,312bp  
**JX026003** : *Enterococcus faecalis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,436bp  
**KF186666** : *Lactobacillus pentosus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,447bp  
**JN660061** : *Lactobacillus fermentum* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,396bp  
**JN660062** : *Staphylococcus condimenti* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,450bp  
**JN660063** : *Staphylococcus saprophyticus* subsp. Bovis : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,482bp  
**JN660064** : *Bacillus licheniformis* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,418bp  
**JF910013** : *Enterococcus casseliflavus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,482bp  
**JF910014** : *Enterococcus casseliflavus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,468bp  
**JF910015** : *Enterococcus durans* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,464bp  
**JF910016** : *Enterococcus durans* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,518bp  
**JX026006** : *Staphylococcus sciuri* subsp. sciuri : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,466bp  
**JX026007** : *Staphylococcus warneri* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,470bp  
**JN660068** : *Bacillus methylotrophicus* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,326bp  
**JN660069** : *Staphylococcus sciuri* subsp. sciuri : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,434bp  
**JN660070** : *Vagococcus lutrae* : Joshi,S.R. and Koijam,K. : 16S r RNA : Partial : 1,459bp

**JN660071** : *Staphylococcus sciuri* subsp. *sciuri* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,464bp  
**JF910017** : *Staphylococcus sciuri* subsp. *sciuri* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,468bp  
**JF910020** : *Bacillus siamensis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,456bp  
**JN660065** : *Bacillus vallismortis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,469bp  
**JN660066** : *Bacillus safensis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,428bp  
**JN660067** : *Bacillus tequilensis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,445bp  
**JN660072** : *Lactobacillus brevis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,439bp  
**JF910018** : *Bacillus aerophilus* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,456bp  
**KF186667** : *Psychrobacter pulmonis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,451bp  
**KF186668** : *Enterococcus faecalis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,444bp  
**KF186669** : *Pisciglobus halotolerans* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,444bp  
**KF186670** : *Enterobacter cancerogenus* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,418bp  
**KF186671** : *Vitreoscilla stercoraria* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,433bp  
**KF186672** : *Pantoea rodasii* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,410bp  
**JX026004** : *Staphylococcus haemolyticus* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,466bp  
**JX026005** : *Lactobacillus pentosus* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,487bp  
**KF186664** : *Staphylococcus cohnii* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,437bp  
**KF186665** : *Bacillus safensis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,435bp  
**JF910019** : *Enterococcus casseliflavus* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,411bp  
**JX026008** : *Brachy bacterium sacelli* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,323bp  
**JN860201** : *Lactobacillus fermentum* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 855bp  
**JN660059** : *Lactobacillus pobuzihii* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1,437bp  
**JN860202** : *Staphylococcus epidermis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 700bp  
**JN860203** : *Bacillus altitudinis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 702bp  
**JN860204** : *Staphylococcus epidermis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 699bp  
**JN860205** : *Lactobacillus fermentum* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 678bp  
**JN860206** : *Brachy bacterium paraconglomeratum* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 620bp  
**JN860207** : *Bacillus clausii* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 821bp  
**JN860208** : *Bacillus subtilis* subsp. *subtilis* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 703bp  
**JN860209** : *Staphylococcus arlettae* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 702bp  
**JN660073** : *Bacillus thio parans* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1440bp  
**JN660074** : *Lactobacillus pobuzihii* : Joshi,S.R. and Kojiam,K. : 16S r RNA : Partial : 1377bp  
**JN660076** : *Lactobacillus acidipiscis* : Joshi,S.R. and Kojiam,K. : 16S rRNA : Partial : 121bp  
**KX896657**:*Bacillus subtilis* subsp.*inaquosorum*SK22: AL Ka-ot,S Banerjee, G Haldar, SR Joshi:16s rRNA: 1417  
**KX896658** : *Bacillus cereus* SK44 : AL Ka-ot, S Banerjee, G Haldar, SR Joshi : 16s rRNA : partial : 1415bp  
**HM448979** : *Pseudomonas aeruginosa* : Joshi,S.R., Sarma,B., Kumar,R. and Acharya,C. : 16s rRNA : 1390bp  
**HM448980** : *P. aeruginosa* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : partial : 1397bp  
**HM448981** : *P. aeruginosa* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : partial : 1397bp  
**HM448982** : *P. aeruginosa* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : partial : 1385bp  
**HM448983** : *P. aeruginosa* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : partial : 1397bp  
**HM448984** : *P. aeruginosa* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : partial : 1400bp  
**HM448985** : *Comamonas testosteroni* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : 1387bp

HM448986 : *P. poae* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : partial : 1408bp  
HM448987 : *P. lurida* : Joshi,S.R., Sarma,B.,Acharya,and CKumar,R. : 16s rRNA : partial : 1404bp  
JN247761 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1402bp  
JN247762 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1437bp  
JN247763 : *P. mosselii* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1338bp  
JN247764 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1418bp  
JN247765 : *P. lurida* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1396bp  
JN247766 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1357bp  
JN247767 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1386bp  
JN247768 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1385bp  
JN247769 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1382bp  
JN247770 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1365bp  
JN247771 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1395bp  
JN247772 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1381bp  
JN247773 : *P. aeruginosa* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1402bp  
JN247774 : *P. putida* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1400bp  
JN247775 : *P. simae* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1364bp  
JN247776 : *P. koreensis* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1307bp  
JQ074037 : *P. lurida* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1318bp  
JQ074038 : *P. palleroniana* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1301bp  
JQ074039 : *P. palleroniana* : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1318bp  
HM448988 : *Alcaligenes* sp : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1399bp  
HM448989 : *Alcaligenes* sp : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1399bp  
HM448990 : *Ochrobactrum* sp : Joshi,S.R., Sarma,B..and Acharya,C : 16s rRNA : partial : 1328bp  
HM448991 : *Brevundimonas diminuta* : Joshi,S.R., Sarma,B.,Kumar,R. and Acharya,C. : 16s rRNA : 1337bp  
HM448992 : *Serratia* sp. : Joshi,S.R., Sarma,B.,Kumar,R. and Acharya,C. : 16s rRNA : partial : 1446bp  
HM448993 : *Serratia* sp. : Joshi,S.R., Sarma,B.,Kumar,R. and Acharya,C. : 16s rRNA : partial : 1452bp  
HM991825 : *Ochrobactrum* sp : Joshi,S.R., Sarma,B.,Kumar,R. and Acharya,C. : 16s rRNA : partial : 1345bp  
HM991826 : *Achromobacter* sp : Joshi,S.R., Sarma,B.,Kumar,R. and Acharya,C. : 16s rRNA : partial : 1405bp  
HM991827 : *Achromobacter* sp : Joshi,S.R., Sarma,B.,Kumar,R. and Acharya,C. : 16s rRNA : partial : 1403bp  
HQ696505 : *S. nematodiphila* : Joshi,S.R., Sarma,B.,Kumar,R. and Acharya,C. : 16s rRNA : partial : 1361bp  
HQ696506 : *S. marcescens* subsp. *sakuensis* : Joshi SR, Sarma,B.,Kumar,R and Acharya,C : 16s rRNA : 1399bp  
JF804769 : *Paenochrobactrum* sp. : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1404bp  
JQ074040 : *Stenotrophomonas maltophilia* : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1301bp  
JQ074041 : *B. vesicularis* : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1308bp  
JQ074042 : *S. marcescens* subsp. *sakuensis* : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1303bp  
JQ074055 : *S. maltophilia* : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1331bp  
JQ074056 : *S. maltophilia* : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1304bp  
HM747949 : *Serratia* sp. : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1443bp  
HM747950 : *Serratia* sp. : Joshi,S.R., Sarma,B.,and Acharya,C. : 16s rRNA : partial : 1410bp  
JN695728 : *Bacillus subtilis* subsp. *subtilis* : Joshi,S.R., Sarma,B. and Banerjee,S : 16s rRNA : partial : 1287bp  
JN653472 : *Pseudomonas aeruginosa* : Joshi,S.R., Sarma,B. and Banerjee,S : 16s rRNA : partial : 1395bp

**JN653473** : *Achromobacter ruhlandii* : Joshi,S.R., Sarma,B. and Banerjee,S : 16s rRNA : partial : 1384bp  
**JN628283** : *Pseudomonasaeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 621bp  
**JN247777** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 581bp  
**JN247778** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 664bp  
**JN628284** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 556bp  
**JN418876** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 649bp  
**JN418877** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 400bp  
**JN628285** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 610bp  
**JN418878** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 652bp  
**JN418879** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 600bp  
**JN247781** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 597bp  
**JN418880** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 649bp  
**JN418881** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 651bp  
**JN418882** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 655bp  
**JN628286** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 644bp  
**JN247782** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 634bp  
**JN418883** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 601bp  
**JN418884** : *P. aeruginosa* : Joshi,S.R., Sarma,B.and Acharya,C. : 16-23S rRNA : partial : 664bp  
**EU579531.1** : *Penicillium* cf. *verruculosum* : Joshi,S.R.,R. Bhagobaty : 18-sr-RNA : partial : 1,155bp  
**HM569608.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : ITS : partial : 234bp  
**HM569609.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : ITS : partial : 278bp  
**HM569610.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : ITS : partial : 122bp  
**HM569611.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : ITS : partial : 239bp  
**HM569612.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : ITS : partial : 240bp  
**HM581667.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : 18-sr-RNA : partial : 746bp  
**HM581668.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : 18-sr-RNA : partial : 740bp  
**HM581669.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : 18-sr-RNA : partial : 742bp  
**HM581670.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : 18-sr-RNA : partial : 748bp  
**HM581671.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : 18-sr-RNA : partial : 749bp  
**HM596779.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : BT : partial : 1026bp  
**HM596780.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : BT : partial : 930bp  
**HM596781.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : BT : partial : 1016bp  
**HM596782.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : BT : partial : 1019bp  
**HM596783.1** : *Fungal* sp. : Joshi,S.R.,R. Bhagobaty : BT : partial : 1029bp  
**KT318608** : *Paenibacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1417bp  
**KT318609** : *Paenibacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1449bp  
**KT318610** : *Paenibacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1435bp  
**KT318611** : *Bacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1442bp  
**KT318612** : *Paenibacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1426bp  
**KT318613** : *Bacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1430bp  
**KT318614** : *Paenibacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1435bp  
**KT318615** : *Bacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1439bp

**KT318616** : *Paenibacillus* sp : M. Nongkhlaw, D. Kalita,S.R. Joshi : 16S rRNA : Partial : 1439bp  
**GQ468395** : *Bacillus cereus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1459bp  
**GQ468396** : *Bacillus altitudinis* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1506bp  
**GU270571** : *Staphylococcus warneri* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1460bp  
**HQ232299** : *Bacillus licheniformis* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1428bp  
**JF768706.1** : *Arthrobacter* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1408bp  
**JF768707.1** : *Arthrobacter* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1435bp  
**JF768708.1** : *Arthrobacter* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1428bp  
**JF768709.1** : *Arthrobacter* sp : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1436bp  
**JF768710.1** : *Bacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1433bp  
**JF768711.1** : *Bacillus halmapalus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1424bp  
**JF768711.1** : *Bacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1422bp  
**JF768712.1** : *Bacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1446bp  
**JF768713.1** : *Bacillus halmapalus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1467bp  
**JF768713.1** : *Bacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1467bp  
**JF768714.1** : *Bacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1458bp  
**JF768715.1** : *Bacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1457bp  
**JF768716.1** : *Chryseobacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1420bp  
**JF768717.1** : *Lysinibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1460bp  
**JF768718.1** : *Lysinibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1463bp  
**JF768719.1** : *Microbacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1431bp  
**JF768720.1** : *Microbacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1419bp  
**JF768721.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1455bp  
**JF768722.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1461bp  
**JF768723.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1500bp  
**JF768724.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1462bp  
**JF768725.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1466bp  
**JF768726.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1457bp  
**JF768727.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1469bp  
**JF768728.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1459bp  
**JF768729.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1465bp  
**JF768730.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1462bp  
**JF768731.1** : *Paenibacillus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1379bp  
**JF768732.1** : *Rhodococcus* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1429bp  
**JF768733.1** : *Sphingobacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1343bp  
**JF768734.1** : *Sphingobacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA: partial : 1445bp  
**JF768735.1** : *Sphingobacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1438bp  
**JF768736.1** : *Sphingobacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA: partial : 1414bp  
**JF768737.1** : *Sphingobacterium* sp. : Joshi SR,Kumar R,Acharya C : 16S rRNA: partial : 1440bp  
**JN164000** : *Lysinibacillus xylanilyticus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1425bp  
**JN164001** : *Bacillus halmapalus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1411bp  
**JN164002** : *Lysinibacillus sphaericus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial: 1403bp



JN164003 : *Lysinibacillus xylanilyticus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1456bp  
JN164004 : *Bacillus thuringiensis* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1400bp  
JN164006 : *Paenibacillus alkaliterrae* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1401bp  
JN164007 : *Lysinibacillus xylanilyticus* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1397bp  
JN230423 : *Staphylococcus arlettae* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1455bp  
GQ468397 : *Burkholderia arbores* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1440bp  
GU270570 : *Stenotrophomonas maltophilia* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1442bp  
HM747953 : *Pseudomonas koreensis* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial :1413bp  
HM747951 : *Pseudomonas koreensis* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial: 1416bp  
HM747952 : *Pseudomonas ficuserectae* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1405bp  
HQ232300 : *Enterobacter kobei* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1399bp  
GQ468398 : *Citrobacter freundii* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1410bp  
GU270572 : *Acinetobacter beijerinckii* : Joshi SR,Kumar R,Acharya C : 16S rRNA : partial : 1439bp  
GU270569 : *Serratia marcescens* subsp. Sakuensis : Joshi SR,Kumar R,Acharya C:16S rRNA : partial :1494bp  
GQ468401 : *Serratia marcescens* subsp. sakuensis :Joshi SR,Kumar R,Acharya C :16S rRNA : partial :1481bp  
GU270568 : *Serratia marcescens* subsp.sakuensis :Joshi SR,Kumar R,Acharya C : 16S rRNA : partial:1485bp  
GQ468400 : *Serratia marcescens* subsp. sakuensis :Joshi SR,Kumar R,Acharya C : 16S rRNA : partial :1482bp  
GU270567 : *Serratia marcescens* subsp.marcescens :Joshi SR,Kumar R,Acharya C:16S rRNA: partial :1439bp  
HM747950:*Serratia marcescens* subsp. marcescens: Joshi SR,Kumar R,Acharya C:16S rRNA : partial : 1410bp  
HM769816.1 : *Bacillus cereus* : Khaund P, Joshi SR : 16S rRNA : partial : 1479bp  
HM769817.1 : *Bacillus subtilis* : Khaund P, Joshi SR : 16S rRNA : partial : 1480bp  
HQ600965.1 : *Penicillium griseofulvum* : Khaund P, Joshi SR : 18S rRNA : partial : 719bp  
HQ600966.1 : *Talaromyces byssochlamydoides* : Khaund P, Joshi SR : 18S rRNA : partial : 729bp  
HQ600967.1 : *Aspergillus niger* : Khaund P, Joshi SR : 18S rRNA : partial : 736bp  
HQ600968.1 : *Umbelopsis* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 746bp  
HQ600969.1 : *Penicillium charlesii* : Khaund P, Joshi SR : 18S rRNA : partial : 736bp  
HQ600970.1 : *Paecilomyces carneus* : Khaund P, Joshi SR : 18S rRNA : partial : 728bp  
HQ600971.1 : *Umbelopsis* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 858bp  
HQ600972.1 : *Davidiella* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 716bp  
HQ600973.1 : *Penicillium purpurogenum* : Khaund P, Joshi SR : 18S rRNA : partial : 736bp  
HQ600974.1 : *Aspergillus* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 743bp  
HQ600975.1 : *Penicillium charlesii* : Khaund P, Joshi SR : 18S rRNA : partial : 727bp  
HQ600976.1 : *Penicillium charlesii* : Khaund P, Joshi SR : 18S rRNA : partial : 729bp  
HQ600977.1 : *Penicillium janthinellum* : Khaund P, Joshi SR : 18S rRNA : partial : 732bp  
HQ600978.1 : *Paecilomyces lilacinus* : Khaund P, Joshi SR : 18S rRNA : partial : 730bp  
HQ600979.1 : *Penicillium charlesii* : Khaund P, Joshi SR : 18S rRNA : partial : 729bp  
HQ600980.1 : *Penicillium olsonii* : Khaund P, Joshi SR : 18S rRNA : partial : 731bp  
HQ600981.1 : *Penicillium* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 742bp  
HQ600982.1 : *Aspergillus nige* : Khaund P, Joshi SR : 18S rRNA : partial : 730bp  
HQ600983.1 : *Emericellopsis maritime* : Khaund P, Joshi SR : 18S rRNA : partial : 720bp  
HQ600984.1 : *Apiospora* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 729bp  
JF927992.1 : *Mucor* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 741bp

**JF927993.1** : *Cladosporium* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 744bp  
**JF927994.1** : *Trichoderma* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 707bp  
**JF968421.1** : *Penicillium purpurogenum* : Khaund P, Joshi SR : 18S rRNA : partial : 485bp  
**JF968422.1** : *Penicillium charlesii* : Khaund P, Joshi SR : 18S rRNA : partial : 521bp  
**JF968423.1** : *Absidia glauca* : Khaund P, Joshi SR : 18S rRNA : partial : 762bp  
**JF968424.1** : *Fusarium* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 743bp  
**JF968425.1** : *Alternaria alternate* : Khaund P, Joshi SR : 18S rRNA : partial : 727bp  
**JF968426.1** : *Penicillium* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 741bp  
**JF968427.1** : *Penicillium chrysogenum* : Khaund P, Joshi SR : 18S rRNA : partial : 736bp  
**JF968428.1** : *Emericellopsis maritime* : Khaund P, Joshi SR : 18S rRNA : partial : 742bp  
**JF968429.1** : *Absidia glauca* : Khaund P, Joshi SR : 18S rRNA : partial : 755bp  
**JF968430.1** : *Penicillium* sp. : Khaund P, Joshi SR : 18S rRNA : partial : 749bp  
**JF968431.1** : *Purpureocillium lilacinum* : Khaund P, Joshi SR : 18S rRNA : partial : 739bp  
**JF968432.1** : *Thysanophora penicillioides* : Khaund P, Joshi SR : 18S rRNA : partial : 591bp  
**JF968433.1** : *Penicillium purpurogenum* : Khaund P, Joshi SR : 18S rRNA : partial : 743bp  
**JF968434.1** : *Thysanophora penicillioides* : Khaund P, Joshi SR : 18S rRNA : partial : 750bp  
**JF968435.1** : *Niesslia exilis* : Khaund P, Joshi SR : 18S rRNA : partial : 576bp  
**KF293400.1** : *Lactarius deliciosus* : Khaund P, Joshi SR : 18S rRNA : partial : 669bp  
**KF293401.1** : *Lactarius volemus* : Khaund P, Joshi SR : 18S rRNA : partial : 673bp  
**KF636761.1** : *Cantharellus cibarius* : Khaund P, Joshi SR : ITS : partial : 895bp  
**KJ411941.1** : *Turbinellus floccosus* : Khaund P, Joshi SR : 18S rRNA : partial : 663bp  
**KJ411942.1** : *Clavulina cristata* : Khaund P, Joshi SR : 18S rRNA : partial : 663bp  
**KJ411943.1** : *Lactarius deliciosus* : Khaund P, Joshi SR : 18S rRNA : partial : 744bp  
**KJ411944.1** : *Lactarius volemus* : Khaund P, Joshi SR : 18S rRNA : partial : 673bp  
**KJ411945.1** : *Cantharellus cibarius* : Khaund P, Joshi SR : 18S rRNA : partial : 659bp  
**KJ411946.1** : *Tricholoma viridiolivaceum* : Khaund P, Joshi SR : 18S rRNA : partial : 518bp  
**KJ411947.1** : *Inocybe aff.* : Khaund P, Joshi SR : 18S rRNA : partial : 518bp  
**KJ411948.1** : *Laccaria vinaceoavellanea* : Khaund P, Joshi SR : 18S rRNA : partial : 750bp  
**KJ411949.1** : *Albatrellus ellisii* : Khaund P, Joshi SR : 18S rRNA : partial : 749bp  
**KJ411950.1** : *Ramaria maculatipes* : Khaund P, Joshi SR : 18S rRNA : partial : 748bp  
**KJ411951.1** : *Turbinellus floccosus* : Khaund P, Joshi SR : ITS : partial : 813bp  
**KJ411952.1** : *Clavulina cristata* : Khaund P, Joshi SR : ITS : partial : 726bp  
**KJ411953.1** : *Tricholoma viridiolivaceum* : Khaund P, Joshi SR : 18S : partial : 647bp  
**KJ411954.1** : *Inocybe aff.* Sphaerospora : Khaund P, Joshi SR : 18S : partial : 700bp  
**KJ411955.1** : *Laccaria vinaceoavellanea* : Khaund P, Joshi SR : 18S : partial : 659bp  
**KJ411956.1** : *Albatrellus ellisii* : Khaund P, Joshi SR : ITS : partial : 680bp  
**KJ411957.1** : *Ramaria maculatipes* : Khaund P, Joshi SR : ITS : partial : 707bp  
**KJ411958.1** : *Turbinellus floccosus* : Khaund P, Joshi SR : RNA : partial : 728bp  
**KJ411959.1** : *Lactarius volemus* : Khaund P, Joshi SR : RNA : partial : 686bp  
**KJ411960.1** : *Cantharellus cibarius* : Khaund P, Joshi SR : RNA : partial : 804bp  
**KJ411961.1** : *Tricholoma viridiolivaceum* : Khaund P, Joshi SR : RNA : partial : 766bp  
**KJ411962.1** : *Inocybe aff.* Sphaerospora : Khaund P, Joshi SR : RNA : partial : 563bp

**KJ411963.1** : *Albatrellus ellisii* : Khaund P, Joshi SR : RNA : partial : 567bp  
**KJ411964.1** : *Ramaria maculatipes* : Khaund P, Joshi SR : RNA : partial : 561bp  
**KJ411965.1** : *Turbinellus floccosus* : Khaund P, Joshi SR : RNA : partial : 695bp  
**KJ411966.1** : *Clavulina cristata* : Khaund P, Joshi SR : RNA : partial : 638bp  
**KJ411967.1** : *Lactarius deliciosus* : Khaund P, Joshi SR : RNA : partial : 733bp  
**KJ411968.1** : *Lactarius volemus* : Khaund P, Joshi SR : RNA : partial : 818bp  
**KJ411969.1** : *Tricholoma viridiolivaceum* : Khaund P, Joshi SR : RNA : partial : 690bp  
**KJ411970.1** : *Inocybe aff. Sphaerospora* : Khaund P, Joshi SR : RNA : partial : 724bp  
**KJ411971.1** : *Albatrellus ellisii* : Khaund P, Joshi SR : RNA : partial : 559bp  
**KJ411972.1** : *Ramaria maculatipes* : Khaund P, Joshi SR : RNA : partial : 732bp  
**JX402416** : *Bacillus thuringiensis* : Joshi, S.R. and Lyngwi, N.A. : 16S r RNA : Partial : 1475bp  
**JX402417** : *Lysinibacillus xylanilyticus* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1470bp  
**JX402418** : *Paenibacillus taichungensis* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1498bp  
**JX402419** : *Bacillus marisflavi* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1488bp  
**JX402420** : *Bacillus mycoides* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1488bp  
**JX402421** : *Bacillus thuringiensis* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1482bp  
**JX402422** : *Lysinibacillus parviboronicapiens* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 14822bp  
**JX402423** : *Bacillus aryabhatai* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1490bp  
**JX402424** : *Bacillus safensis* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1459bp  
**JX402425** : *Bacillus cereus* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1488bp  
**JX402426** : *Bacillus thuringiensis* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1489bp  
**JX402427** : *Bacillus flexus* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1488bp  
**JX402428** : *Bacillus sonorensis* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1474bp  
**JX402429** : *Bacillus methylothrophicus* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1460bp  
**JX402430** : *Viridibacillus arenosi* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1486bp  
**JX402431** : *Bacillus psychrosaccharolyticus* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1489bp  
**JX402432** : *Bacillus thuringiensis* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1484bp  
**JX402433** : *Bacillus cereus* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1486bp  
**JX402434** : *Bacillus weihenstephanensis* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1458bp  
**JX402435** : *Bacillus mycoides* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1498bp  
**JX402436** : *Bacillus aryabhatai* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1483bp  
**JX402437** : *Bacillus humi* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1475bp  
**JX402438** : *Bacillus simplex* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1476bp  
**JX402439** : *Paenibacillus tylopili* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1461bp  
**JX402440** : *Viridibacillus arvi* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1491bp  
**JX402441** : *Bacillus methylothrophicus* : Joshi, S. R and Lyngwi, N. A : 16S r RNA : Partial : 1451bp  
**KF874290** : *Bacillus thuringiensis* SG1 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 837bp  
**KF874291** : *Lysinibacillus xylanilyticus* SG2 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 801bp  
**KF874292** : *Paenibacillus taichungensis* SG3 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 849bp  
**KF874293** : *Bacillus mycoides* SG5 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 792bp  
**KF874294** : *Bacillus thuringiensis* SG6 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 801bp  
**KF874295** : *Lysinibacillus parviboronicapiens* SG7 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 801bp

**KF874296** : *Bacillus safensis* SG9 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 804bp  
**KF874297** : *Bacillus cereus* SG10 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 840bp  
**KF874298** : *Bacillus thuringiensis* SG11 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 837bp  
**KF874299** : *Bacillus sonorensis* SG13 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 807bp  
**KF874300** : *Bacillus methylotrophicus* SG14 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 795bp  
**KF874301** : *Viridibacillus arenosi* SG15 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 801bp  
**KF874302** : *Bacillus thuringiensis* SG17 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 837bp  
**KF874303** : *Bacillus cereus* SG18 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 840bp  
**KF874304** : *Bacillus weihenstephanensis* SG19 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 810bp  
**KF874305** : *Bacillus mycoides* SG20 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 792bp  
**KF874306** : *Bacillus humi* SG22 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 804bp  
**KF874307** : *Paenibacillus tylopili* SG24 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 849bp  
**KF874308** : *Viridibacillus arvi* SG26 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 801bp  
**KF874309** : *Bacillus methylotrophicus* SG27 : Joshi, S. R and Lyngwi, N. A : accd : Partial : 795bp  
**KF874310** : *Bacillus thuringiensis* SG1 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1635bp  
**KF874311** : *Paenibacillus taichungensis* SG3 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1654bp  
**KF874312** : *Bacillus mycoides* SG5 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1714bp  
**KF874313** : *Bacillus thuringiensis* SG6 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1596bp  
**KF874314** : *Bacillus cereus* SG10 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1563bp  
**KF874315** : *Bacillus thuringiensis* SG11 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1611bp  
**KF874316** : *Bacillus thuringiensis* SG17 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1713bp  
**KF874317** : *Bacillus cereus* SG18 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1491bp  
**KF874318** : *Bacillus weihenstephanensis* SG19 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1691bp  
**KF874319** : *Bacillus mycoides* SG20 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1701bp  
**KF874320** : *Paenibacillus tylopili* SG24 : Joshi, S. R and Lyngwi, N. A : (asbA) : Partial : 1662bp  
**JX469423** : *Aspergillus fumigatus* : Joshi SR and Lamabam S.D. : ITS : Partial : 574bp  
**JX853767** : *Fusarium oxysporum* : Joshi SR and Lamabam S.D. : ITS : Partial : 518bp  
**JX469424** : *Aspergillus niger* : Joshi SR and Lamabam S.D. : ITS : Partial : 581bp  
**JX853766** : *Cladosporium cladosporioides* : Joshi SR and Lamabam S.D. : ITS : Partial : 512bp  
**JX469419** : *Aspergillus niger* : Joshi SR and Lamabam S.D. : ITS : Partial : 573bp  
**JX469420** : *Aspergillus tamaraii* : Joshi SR and Lamabam S.D. : ITS : Partial : 490bp  
**JX469421** : *Alternaria solani* : Joshi SR and Lamabam S.D. : ITS : Partial : 541bp  
**JX469422** : *Penicillium funiculosum* : Joshi SR and Lamabam S.D. : ITS : Partial : 554bp  
**JX853765** : *Cryptosporiopsis ericae* : Joshi SR and Lamabam S.D. : ITS : Partial : 538bp  
**KF358718** : *Arthrimum* sp : Joshi SR and Lamabam S.D. : ITS : Partial : 557bp  
**KF358719** : *Paecilomyces lilacinus* : Joshi SR and Lamabam S.D. : ITS : Partial : 532bp  
**KF358720** : *Penicillium ochrochloron* : Joshi SR and Lamabam S.D. : ITS : Partial : 563bp  
**JN040731** : *Aspergillus* sp : Joshi SR and Lamabam S.D. : 18S rRNA : Partial : 712bp  
**JN247750** : *Penicillium* sp. : Joshi SR and Lamabam S.D. : 18S rRNA : Partial : 724bp  
**JN040743** : *Penicillium decumbens* : Joshi SR and Lamabam S.D. : 18S rRNA : Partial : 720bp  
**JN040746** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D. : 18S rRNA : Partial : 669bp  
**JN040747** : *Penicillium piceum* : Joshi SR and Lamabam S.D. : 18S rRNA : Partial : 722bp

**JN247760** : *Penicillium griseofulvum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 741bp  
**JN040728** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 718bp  
**JN040733** : *Penicillium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 743bp  
**JN040744** : *Chromocleista malachitea* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 721bp  
**JN040737** : *Chromocleista malachitea* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 720bp  
**JN040748** : *Thysanophora longispora* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 744bp  
**JN040735** : *Talaromyces leycettanus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 707bp  
**JN040739** : *Penicillium piceum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 730bp  
**JN040738** : *Talaromyces leycettanus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 443bp  
**JN247757** : *Nectria lugdunensis* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 665bp  
**JN040741** : *Fusarium oxysporum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 743bp  
**JN040749** : *Cladosporium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 745bp  
JN040745 : *Hypocrea koningii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 723bp  
JN247755 : *Pleurostomophora richardsiae* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 663bp  
JN247749 : *Mortierella wolfii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 663bp  
JN040732 : *Fusarium oxysporum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 722bp  
JN040730 : *Fusarium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 739bp  
JN040736 : *Apiospora montagnei* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 743bp  
**JN860210** : *Aspergillus terreus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 743bp  
**JN247752** : *Hypocrea koningii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 746bp  
**JN247758** : *Mucor genevensis* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 741bp  
**JN247753** : *Aspergillus fumigates* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 722bp  
**JN247751** : *Absidia glauca* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 685bp  
**JQ256464** : *Penicillium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 701bp  
**JQ256465** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 696bp  
**JQ256466** : *Penicillium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 705bp  
**JQ256467** : *Penicillium chrysogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 580bp  
**JQ256468** : *Fusarium oxysporum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 720bp  
**JQ256469** : *Aspergillus versicolor* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 702bp  
**JQ256470** : *Talaromyces flavus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 707bp  
**JQ256473** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 653bp  
**JQ256474** : *Chamaeleomyces granulomatis* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 599bp  
**JQ256475** : *Penicillium decumbens* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 672bp  
**JQ074019** : *Absidia glauca* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 769bp  
**JQ074020** : *Talaromyces byssochlamydoides* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 750bp  
**JQ074021** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 749bp  
**JQ074022** : *Talaromyces flavus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 735bp  
**JQ074023** : *Fusarium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 742bp  
**JQ074024** : *Fusarium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 743bp  
**JQ074025** : *Fusarium oxysporum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 731bp  
**JQ074026** : *Aspergillus nomius* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 734bp  
**JQ074027** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 744bp

**JQ074028** : *Talaromyces flavus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 742bp  
**JQ074029** : *Penicillium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 752bp  
**JQ074030** : *Chromocleista malachitea* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 741bp  
**JQ074031** : *Penicillium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 738bp  
**JQ074032** : *Hypocrea rufa* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 732bp  
**JQ074033** : *Penicillium decumbens* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 736bp  
**JQ074034** : *Penicillium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 726bp  
**JQ074036** : *Talaromyces flavus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 747bp  
**JQ281523** : *Aspergillus versicolor* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 703bp  
**JQ281524** : *Trichoderma* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 669bp  
**JQ281525** : *Talaromyces byssochlamydoides* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 690bp  
**JQ281526** : *Fusarium oxysporum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 701bp  
**JQ281527** : *Penicillium decumbens* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 713bp  
**JQ281528** : *Hypocrea rufa* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 705bp  
**JQ281529** : *Fusarium oxysporum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 691bp  
**JQ281530** : *Talaromyces flavus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 703bp  
**JQ281531** : *Hypocrea rufa* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 729bp  
**JQ824836** : *Aspergillus flavus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 670bp  
**JQ824837** : *Talaromyces flavus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 701bp  
**JQ824838** : *Aspergillus awamori* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 713bp  
**JQ824839** : *Penicillium* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 700bp  
**JQ824840** : *Aspergillus fumigates* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 712bp  
**JF927993** : *Trichoderma viride* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 744bp  
**JF968421** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 485bp  
**JF968422** : *Penicillium charlesii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 521bp  
**JF968423** : *Absidia gluaca* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 762bp  
**JF968424** : *Fusarium oxysporum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 743bp  
**JF968425** : *Alternaria alternata* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 727bp  
**JF968426** : *Penicillium griseofulvum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 741bp  
**JF968429** : *Absidia gluaca* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 755bp  
**JF968433** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D, : 18S rRNA : Partial : 743bp  
**JF968434** : *Thysanophora penicillioides* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 750bp  
**HQ600965** : *Penicillium griseofulvum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 719bp  
**HQ600968** : *Umbelopsis* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 746bp  
**HQ600969** : *Penicillium charlesii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 736bp  
**HQ600971** : *Umbilopses* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 858bp  
**HQ600972** : *Davidiella tassiana* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 712bp  
**HQ600973** : *Penicillium purpurogenum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 736bp  
**HQ600974** : *Aspergillus* sp. : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 743bp  
**HQ600975** : *Penicillium charlesii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 727bp  
**HQ600976** : *Penicillium charlesii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 729bp  
**HQ600977** : *Penicillium janthinellum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 732bp

**HQ600978** : *Paecilomyces lilacinus* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 730bp  
**HQ600979** : *Penicillium charlesii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 729bp  
**HQ600980** : *Penicillium olsonii* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 731bp  
**HQ600981** : *Penicillium glabrum* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 742bp  
**HQ600982** : *Aspergillus niger* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 730bp  
**HQ600984** : *Apiospora montagnei* : Joshi SR and Lamabam S.D : 18S rRNA : Partial : 729bp  
**HQ141620** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1498bp  
**HQ141621** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1479bp  
**HQ141622** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1482bp  
**HQ141623** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1487bp  
**HQ141624** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1477bp  
**JN680705** : *Lactobacillus pentosus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1510bp  
**JN680706** : *Lactobacillus rossiae* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1507bp  
**JN680707** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1519bp  
**JN680708** : *Lactobacillus rossiae* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1504bp  
**HQ141625** : *Bacillus subtilis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1470bp  
**JF804773** : *Bacillus thuringiensis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1451bp  
**JF804774** : *Bacillus thuringiensis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1474bp  
**JF804770** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1481bp  
**JF804771** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1434bp  
**JN680696** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1432bp  
**JF804772** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1458bp  
**JN255522** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1423bp  
**JN255524** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1402bp  
**JN255521** : *Staphylococcus gallinarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1366bp  
**JN255525** : *Staphylococcus condimentii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1486bp  
**JN255523** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1334bp  
**JN680701** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1485bp  
**JN680702** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1483bp  
**JN680697** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1487bp  
**JN680698** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1439bp  
**JN680699** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1467bp  
**JN680700** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1474bp  
**JN680703** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1469bp  
**JN680704** : *Raoutella* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1473bp  
**KC478503** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1461bp  
**KC478504** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1473bp  
**KC478505** : *Lactobacillus xiangfangensis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1482bp  
**KC478506** : *Lactobacillus pentosus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1511bp  
**KC478507** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1483bp  
**KC478508** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1486bp  
**KC478509** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1519bp

**KC478510** : *Enterococcus gallinarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1455bp  
**KC478511** : *Enterococcus faecalis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1510bp  
**KC478512** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1474bp  
**KC478513** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1482bp  
**KC478514** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1481bp  
**KC478515** : *Enterococcus casseliflavus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1464bp  
**HQ141620** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1498bp  
**HQ141621** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1479bp  
**HQ141622** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1482bp  
**HQ141623** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1487bp  
**HQ141624** : *Lactobacillus pobuzihii* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1477bp  
**JN680705** : *Lactobacillus pentosus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1510bp  
**JN680706** : *Lactobacillus rossiae* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1507bp  
**JN680707** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1519bp  
**JN680708** : *Lactobacillus rossiae* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1504bp  
**HQ141625** : *Bacillus subtilis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1470bp  
**JF804773** : *Bacillus thuringiensis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1451bp  
**JF804774** : *Bacillus thuringiensis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1474bp  
**JF804770** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1481bp  
**JF804771** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1434bp  
**JN680696** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1432bp  
**JF804772** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1458bp  
**JN255522** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1423bp  
**JN255524** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1402bp  
**JN255521** : *Staphylococcus gallinarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1366bp  
**JN255525** : *Staphylococcus condimenti* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1486bp  
**JN255523** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1334bp  
**JN680701** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1485bp  
**JN680702** : *Staphylococcus saprophyticus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1483bp  
**JN680697** : *Staphylococcus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1487bp  
**JN680698** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1439bp  
**JN680699** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1467bp  
**JN680700** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1474bp  
**JN680703** : *Enterobacter* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1469bp  
**JN680704** : *Raoultella* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1473bp  
**KC478503** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1461bp  
**KC478504** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1473bp  
**KC478505** : *Lactobacillus xiangfangensis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1482bp  
**KC478506** : *Lactobacillus pentosus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1511bp  
**KC478507** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1483bp  
**KC478508** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1486bp  
**KC478509** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1519bp



**KC478510** : *Enterococcus gallinarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1455bp  
**KC478511** : *Enterococcus faecalis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1510bp  
**KC478512** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1474bp  
**KC478513** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1482bp  
**KC478514** : *Enterococcus faecium* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1481bp  
**KC478515** : *Enterococcus casseliflavus* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1464bp  
**JX188047** : *Lactobacillus* sp : SR Joshi and George F Rapsang : 16S rRNA : Partial : 545bp  
**JX188046** : *Lactobacillus plantarum* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 548bp  
**JX188048** : *Lactobacillus brevis* : SR Joshi and George F Rapsang : 16S rRNA : Partial : 518bp  
**JX500091** : *Lactobacillus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 748bp  
**JX500092** : *Lactobacillus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 499bp  
**JX500093** : *Lactobacillus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 1537bp  
**JX500094** : *Lactobacillus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 455bp  
**JX500095** : *Lactobacillus* sp. : SR Joshi and George F Rapsang : 16S rRNA : Partial : 577bp  
**JN613282** : *Serratia marcescens* cenA : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,368 bp  
**JN613283** : *Bacillus subtilis* cenB : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,411 bp  
**JN628288** : *Bacillus tequilensis* CEN3E : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,404 bp  
**JN628290** : *Bacillus aryabhatai* CEN5E : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,338 bp  
**JN628291** : *Bacillus thuringiensis* CEN6E : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,290 bp  
**JN628292** : *Pantoea eucalypti* CEN7E : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,256 bp  
**JX298807** : *Bacillus* sp. F21 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,420 bp  
**JN585959** : *Paenibacillus uliginis* C22 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 373 bp  
**JN585960** : *Bacillus siamensis* : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 401 bp  
**JN418870** : *Lysinibacillus xylanilyticus* F1 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 401 bp  
**JX390622** : *Bacillus thuringiensis* F41 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,412 bp  
**JN653461** : *Enterobacter* sp. EP2a : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1,253 bp  
**JN418873** : *Curtobacterium citreum* E4 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 381 bp  
**JQ236632** : *Bacillus methylotrophicus* POTA:SR Joshi and Fenella MW Nongkhilaw :16S rRNA :Partial:1418bp  
**JQ770186** :*Herminiimonas saxobidens* AA : SR Joshi and Fenella MW Nongkhilaw :16S rRNA :Partial:1399 bp  
**JQ281538** : *Bacillus thuringiensis* POT1 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1412 bp  
**JQ281539** :*Pseudomonas palleroniana* POT2 : SR Joshi and FMW Nongkhilaw : 16S rRNA : Partial : 1405 bp  
**JQ007727** : *Comamonas* sp. POUX : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1399 bp  
**JQ281541** :*Stenotrophomonas maltophilia* POT5 :SR Joshi and Fenella MW Nongkhilaw :16S rRNA :Partial:1403 bp  
**JQ770187** :*Pseudomonas palleroniana* Y1 :SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial :1406 bp  
**JQ770188** : *Pseudomonas argentinensis* Y2 :SR Joshi and Fenella MW Nongkhilaw :16S rRNA :Partial:1407 bp  
**JQ236625** :*Pseudomonas baetica* ENIB7 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1399 bp  
**JQ446440** : *Pantoea eucalypti* Y5- : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1412 bp  
**JQ446442** : *Bacillus thuringiensis* Y7: SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1425 bp  
**JQ074052** : *Leclercia adecarboxylata* CC4:SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 1270 bp  
**JQ074054** : *Exiguobacterium indicum* CC8:SR Joshi and Fenella MW Nongkhilaw : 16S rRNA: Partial : 1372 bp  
**JQ292906** : *Buttiauxella izardii* M22 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA : Partial : 840 bp  
**JN585958** : *Lysinibacillus xylanilyticus* C21 : SR Joshi and Fenella MW Nongkhilaw : 16S rRNA :Partial:396 bp

**JX298809** : *Bacillus mycoides* M31 : SR Joshi and Fenella MW Nongkhlaw : 16S rRNA : Partial : 1456bp  
**JX390623** : *Citrobacter youngae* ME5 : SR Joshi and Fenella MW Nongkhlaw : 16S rRNA : Partial : 1447 bp  
**JN418875** : *Bacillus thuringiensis* MEA7 : SR Joshi and Fenella MW Nongkhlaw : 16S rRNA : Partial : 387 bp  
**JX390624**:*Raoultella ornithinolytica* ME11:SR Joshi and FMW Nongkhlaw:16SrRNA:Partial: 1442 bp  
**JN680692** : *Enterobacter soli* MEA10- : SR Joshi and Fenella MW Nongkhlaw : 16S rRNA : Partial : 1331bp  
**KC841158** : *Lactobacillus curvatus* : Kojiam,K. and Joshi,S.R : priming glycosyltransferase:partial : 201bp  
**KC841160** : *Lactobacillus fermentum* : Kojiam,K. and Joshi,S.R : dextransucrase : partial : 576bp  
**KC841161** : *Lactobacillus fermentum* : Kojiam,K. and Joshi,S.R : dextransucrase : partial : 603bp  
**KC841162** : *Lactobacillus fermentum* : Kojiam,K. and Joshi,S.R : dextransucrase : partial : 524bp  
**KC841159**:*Vagococcus lutrae*:Kojiam,K. and Joshi,S.R :putative glycosyl phosphotransferase:partial: 201bp  
**KX951469** : *Iiyonectria* sp. : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 473bp  
**KX951470** : *Xylariales* sp. : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 462bp  
**KX951471** : *Phoma labilis* : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 477bp  
**KX951472** : *Phoma exigua* : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 491bp  
**KX951473** : *Diaporthe* sp. : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 461bp  
**KX951474**:*Iiyonectria radicolica* : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani:ITS:Partial: 481bp  
**KX951475** : *Diaporthe* sp. : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: : 460bp  
**KX951476** :*Colletotrichum gloeosporoids*: SR Joshi, Susmita Paul,RK Bhagobaty and MC Nihalani:ITS :510bp  
**KX951477**:*Colletotrichum gloeosporoids*: SR Joshi, Susmita Paul,RK Bhagobaty and MC Nihalani:ITS:464bp  
**KX951478**:*Colletotrichum gloeosporoids*: SR Joshi, Susmita Paul,RK Bhagobaty and MC Nihalani:ITS: 458bp  
**KX951479** : *Phomopsis* sp. :SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 443bp  
**KX951480** : *Phomopsis* sp. : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 490bp  
**KX951481** : *Colletotrichum gloeosporoids* :SR Joshi,Susmita Paul,RK Bhagobaty and MC Nihalani:ITS:469bp  
**KX951482** : *Fusarium solani* : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS : Partial: 460bp  
**KX951483** : *Pseudocosmospora vilior* : SR Joshi, Susmita Paul, RK Bhagobaty and MC Nihalani : ITS :495bp  
**JN600439.1** : *Acidobacteria bacterium* RMSRJ93 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600438.1** : *Beta proteobacterium* RMSRJ92 : : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600437.1** : *Firmicutes bacterium* RMSRJ91 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600436.1** : *Firmicutes bacterium* RMSRJ90 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600435.1** : *Beta roteobacterium* RMSRJ89 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600434.1** : *Gamma proteobacterium* RMSRJ88 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600433.1** : *Acidobacteria bacterium* RMSRJ87 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600432.1** : *Acidobacteria bacterium* RMSRJ86 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600431.1** : *Firmicutes bacterium* RMSRJ85 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600430.1** : *Alpha proteobacterium* RMSRJ84 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600429.1** : *Chlorobi bacterium* RMSRJ83 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600428.1** : *Alpha proteobacterium* RMSRJ82 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600427.1** : *Alpha proteobacterium* RMSRJ81 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600426.1** : *Beta proteobacterium* RMSRJ80 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600425.1** : *Alpha proteobacterium* RMSRJ79 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600424.1** : *Beta proteobacterium* RMSRJ78 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600423.1** : *Alpha proteobacterium* RMSRJ77 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial

JN600422.1 : *Acidobacteria bacterium* RMSRJ76 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600421.1 : *Acidobacteria bacterium* RMSRJ75 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600420.1 : *Beta proteobacterium* RMSRJ74 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600419.1 : *Gamma proteobacterium* RMSRJ73 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600418.1 : *Acidobacteria bacterium* RMSRJ72 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600417.1 : *Gamma proteobacterium* RMSRJ71 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA  
JN600416.1 : *Verrucomicrobium* sp. RMSRJ70 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600415.1 : *Acidobacteria bacterium* RMSRJ69 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600414.1 : *Actinobacterium* RMSRJ68 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600413.1 : *Actinobacterium* RMSRJ67 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600412.1 : *Acidobacteria bacterium* RMSRJ66 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600411.1 : *Actinobacterium* RMSRJ65 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600410.1 : *Firmicutes bacterium* RMSRJ64 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600409.1 : *Acidobacteria bacterium* RMSRJ63 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600408.1 : *Alph proteobacterium* RMSRJ62 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600407.1 : *Chloroflexi bacterium* RMSRJ61 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600406.1 : *Delta proteobacterium* RMSRJ60 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600405.1 : *Acidobacteria bacterium* RMSRJ59 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600404.1 : *Delta proteobacterium* RMSRJ58 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600403.1 : *Delta proteobacterium* RMSRJ57 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600402.1 : *Firmicutes bacterium* RMSRJ46 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600401.1 : *Firmicutes bacterium* RMSRJ45 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600400.1 : *Gamma proteobacterium* RMSRJ44 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600399.1 : *Gamma proteobacterium* RMSRJ43 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600398.1 : *Firmicutes bacterium* RMSRJ42 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600397.1 : *Actinobacterium* RMSRJ41 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600396.1 : *Beta proteobacterium* RMSRJ40 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600395.1 : *Beta proteobacterium* RMSRJ39 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600394.1 : *Acidobacteria bacterium* RMSRJ38 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600393.1 : *Acidobacteria bacterium* RMSRJ37 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600392.1 : *Acidobacteria bacterium* RMSRJ36 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600391.1 : *Delta proteobacterium* RMSRJ35 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600390.1 : *Verrucomicrobium* sp. RMSRJ34 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600389.1 : *Acidobacteria bacterium* RMSRJ33 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600388.1 : *Beta proteobacterium* RMSRJ32 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600387.1 : *Acidobacteria bacterium* RMSRJ31 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600386.1 : *Beta proteobacterium* RMSRJ30 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600385.1 : *Acidobacteria bacterium* RMSRJ29 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600384.1 : *Acidobacteria bacterium* RMSRJ28 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
JN600383.1 : *Acidobacteria bacterium* RMSRJ27 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600382.1 : *Chloroflexi bacterium* RMSRJ26 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
JN600381.1 : *Alpha proteobacterium* RMSRJ25 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial

**JN600380.1** : *Alpha proteobacterium* RMSRJ24 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600379.1** : *Alpha proteobacterium* RMSRJ23 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600378.1** : *Alpha proteobacterium* RMSRJ22 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600377.1** : *Alpha proteobacterium* RMSRJ21 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600376.1** : *Firmicutes bacterium* RMSRJ20 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600375.1** : *Beta proteobacterium* RMSRJ19 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600374.1** : *Delta proteobacterium* RMSRJ18 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600373.1** : *Alpha proteobacterium* RMSRJ17 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600372.1** : *Alpha proteobacterium* RMSRJ16 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600371.1** : *Alpha proteobacterium* RMSRJ15 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600370.1** : *Acidobacteria bacterium* RMSRJ14 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600369.1** : *Beta proteobacterium* RMSRJ13 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600368.1** : *Beta proteobacterium* RMSRJ12 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600367.1** : *Firmicutes bacterium* RMSRJ11 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600366.1** : *Acidobacteria bacterium*:RMSRJ10 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600365.1** : *Acidobacteria bacterium* RMSRJ9 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600364.1** : *Alpha proteobacterium* RMSRJ8 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600363.1** : *Acidobacteria bacterium* RMSRJ6 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**JN600362.1** : *Gamma proteobacterium* RMSRJ5 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600361.1** : *Gamma proteobacterium* RMSRJ4 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600360.1** : *Gamma proteobacterium* RMSRJ3 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600359.1** : *Acidobacteria bacterium* RMSRJ2 : R Kumar, M Nongkhlaw and SR Joshi : 16SrRNA : partial  
**JN600358.1** : *Beta proteobacterium* RMSRJ1 : R Kumar, M Nongkhlaw and SR Joshi :16SrRNA : partial  
**KY216110** : *Absidia* sp. MER-R1 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 475bp  
**KY216111** : *Penicillium kojigenum* MER-01 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 565 bp  
**KY216112** : *Cladosporium sphaerospermum* MER-02 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 571 bp  
**KY216113** : *Penicillium atramentosum* MER-03 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 556 bp  
**KY216114** : *Aspergillus ruber* MER-04 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS4 : 560 bp  
**KY216115** : *Fusarium oxysporum* MER-05 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 566 bp  
**KY216116** : *Trichoderma atroviride* MER-06 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 569 bp  
**KY216117** : *Penicillium aurantiogriseum* MER-08 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 573 bp  
**KY216118** : *Metarhizium* sp. MER-14 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 612 bp  
**KY216119** : *Trichoderma* sp. MER-10 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS4 : 581 bp  
**KY216120** : *Penicillium* sp. MER-603 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 619 bp  
**KY216121** : *Trichoderma amazonicum* MER-09 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS4 : 606 bp  
**KY216122** : *Talaromyces* sp. MER-606 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 572 bp  
**KY216123** : *Penicillium simplicissimum* MER-PC : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS4 : 613 bp  
**KY216124** : *Trichoderma koningii* MER-508 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 588 bp  
**KY216125** : *Aspergillus sydowii* MER-913 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 577 bp  
**KY216126** : *Backusella tuberculispora* MER-31 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS4 : 625 bp  
**KY216127** : *Pochonia rubescens* MER-GN : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 571 bp  
**KY216128** : *Clonostachys* sp. MER-605 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 567 bp

**KY216129** : *Chaunopychnis* sp. MER-12 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 607 bp  
**KY216130** : *Clonostachys* sp. MER-104 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS4 : 611 bp  
**KY216131** : *Clonostachys candelabrum* MER-D : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS4 : 540 bp  
**KY216132** : *Trichoderma erinaceum* MER-A2 : S. R. Joshi,H. Romola Devi,M. S. Dkhar : ITS1 : 584 bp  
**KY594002**: *Pleurotus ostreatus* : M Borthakur, and SR Joshi : ITS : partial : 553bp  
**KY594003**: *Myrothecium verrucaria* : M Borthakur, J Gogoi and SR Joshi: ITS: partial : 749 bp  
**KY594004**: *Penicillium striatisporum*: M Borthakur, J Gogoi and SR Joshi : ITS: partial : 615 bp  
**KY883344**: *Scleroderma citrinum* : M Borthakur and SR Joshi : ITS : partial : 693bp  
**KX011029** : *Pseudomonas* sp. W2 : Debajit Kalita and SR Joshi : 16SrRNA : partial  
**KX953851** : *Providencia* sp DKSJRJ S7 : Debajit Kalita and SR Joshi : 16SrRNA : partial  
**AJ575658** : *Paenibacillus jamilae* PKR1 : Debajit Kalita and SR Joshi : 16SrRNA : partial  
**JF768708** : *Arthrobacter* sp RSBA 1 : Debajit Kalita and SR Joshi : 16SrRNA : partial  
**MG234433**: *Bacillus amyloliquefaciens* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1475bp  
**MG234434**: *Bacillus velezensis* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1464bp  
**MG234435**: *Bacillus subtilis* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1459bp  
**MG234436**: *Curtobacterium* sp. Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1395bp  
**MG234437**: *Acinetobacter baumannii* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1449bp  
**MG234438**: *Bacillus megaterium* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1472bp  
**MG234439**: *Bacillus pumilus* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1462bp  
**MG234440**: *Bacillus pumilus* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1480bp  
**MG234441**: *Curtobacterium luteum* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1405bp  
**MG234442**: *Curtobacterium* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1435bp  
**MG234443**: *Enterobacter cloacae* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1413bp  
**MG234444**: *Bacillus licheniformis* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1455bp  
**MG234445**: *Achromobacter* sp. Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1443bp  
**MG234446**: *Streptomyces* sp. Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1411bp  
**MG234447**: *Bacillus mycoides* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1466bp  
**MG234448**: *Alcaligenes faecalis* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1516bp  
**MG234449**: *Alcaligenes faecalis* Banerjee, A., Joshi,S.R.: 16S rRNA : Partial: 1443bp  
**MG181224**: *Enterobacter mori* DKSJRJ.DK2 : SR Joshi and Debajit Kalita: 16S rRNA : Partial : 1,460 bp  
**MF564074**: *Penicillium chrysogenum*; SR Joshi and DA Bareh; ITS gene sequence; 545 bp  
**MF564075**: *Penicillium manginii*; SR Joshi and DA Bareh; ITS gene sequence; 516 bp  
**MF564076**: *Penicillium striatisporum*; SR Joshi and DA Bareh; ITS gene sequence; 530 bp  
**MF564077**: *Penicillium chrysogenum*; SR Joshi and DA Bareh; ITS gene sequence; 519 bp  
**MF564078**: *Penicillium crustosum*; SR Joshi and DA Bareh; ITS gene sequence; 520 bp  
**MF564079**: *Cytospora* sp. SR Joshi and DA Bareh; ITS gene sequence; 558 bp  
**MF564080**: *Penicillium* sp. SR Joshi and DA Bareh; ITS gene sequence; 525 bp  
**MF564081**: *Purpureocillium lilacinum*; SR Joshi and DA Bareh; ITS gene sequence; 547 bp  
**MF564082**: *Penicillium chrysogenum*; SR Joshi and DA Bareh; ITS gene sequence; 528 bp  
**MF564083**: *Aspergillus westerdijkiae*; SR Joshi and DA Bareh; ITS gene sequence; 536 bp  
**MF564084**: *Perenniporia tephropora*; SR Joshi and DA Bareh; ITS gene sequence; 587 bp  
**MF564085**: *Talaromyces* sp. SR Joshi and DA Bareh; ITS gene sequence; 513 bp

**MF564086**; *Perenniporia tephropora*; SR Joshi and DA Bareh; ITS gene sequence; 591 bp  
**MF564087**; *Trichoderma harzianum*; SR Joshi and DA Bareh; ITS gene sequence; 551 bp  
**MF564088**; *Penicillium* sp. SR Joshi and DA Bareh; ITS gene sequence; 529 bp  
**MF564089**; *Penicillium* sp. SR Joshi and DA Bareh; ITS gene sequence; 521 bp  
**MF564090**; *Fungal* sp. SR Joshi and DA Bareh; ITS gene sequence; 594 bp  
**MF564091**; *Peniophora* sp. SR Joshi and DA Bareh; ITS gene sequence; 589 bp  
**MF564092**; *Phlebiopsis* sp. SR Joshi and DA Bareh; ITS gene sequence; 596 bp  
**MF564093**; *Tbalaromyces verruculosus*; SR Joshi and DA Bareh; ITS gene sequence; 535 bp  
**MF564094**; *Penicillium chrysogenum*; SR Joshi and DA Bareh; ITS gene sequence; 538 bp  
**MF564095**; *Penicillium citrinum*; SR Joshi and DA Bareh; ITS gene sequence; 511 bp  
**MF564096**; *Aspergillus jensenii*; SR Joshi and DA Bareh; ITS gene sequence; 523 bp  
**MF564097**; *Aspergillus aculeatinus*; SR Joshi and DA Bareh; ITS gene sequence; 526 bp  
**MF564098**; *Aspergillus westerdijkiae*; SR Joshi and DA Bareh; ITS gene sequence; 539 bp  
**MF564099**; *Aspergillus niger*; SR Joshi and DA Bareh; ITS gene sequence; 548 bp  
**MF564100**; *Aspergillus niger*; SR Joshi and DA Bareh; ITS gene sequence; 542 bp  
**MF564101**; *Clonostachys rosea*; SR Joshi and DA Bareh; ITS gene sequence; 517 bp  
**MF564102**; *Bjerkandera adusta*; SR Joshi and DA Bareh; ITS gene sequence; 619 bp  
**MF564103**; *Penicillium citrinum*; SR Joshi and DA Bareh; ITS gene sequence; 488 bp  
**MF564104**; *Penicillium crustosum*; SR Joshi and DA Bareh; ITS gene sequence; 528 bp  
**MF564105**; *Trichoderma gamsii*; SR Joshi and DA Bareh; ITS gene sequence; 547 bp  
**MF564106**; *Meyerozyma caribbica*; SR Joshi and DA Bareh; ITS gene sequence; 547 bp  
**MF564107**; *Penicillium crustosum*; SR Joshi and DA Bareh; ITS gene sequence; 482 bp  
**MF564108**; *Cytospora* sp. SR Joshi and DA Bareh; ITS gene sequence; 548 bp  
**MF564109**; *Purpureocillium lilacinum*; SR Joshi and DA Bareh; ITS gene sequence; 545 bp  
**MF564110**; *Penicillium citrinum*; SR Joshi and DA Bareh; ITS gene sequence; 501 bp  
**MF564111**; *Penicillium chrysogenum*; SR Joshi and DA Bareh; ITS gene sequence; 535 bp  
**MF143554**; *Cladosporium cladosporioides* : SR Joshi and Susmita Paul : ITS: Partial : 530bp  
**MF143555**; *Xylariaceae* sp.: SR Joshi and Susmita Paul : ITS:Partial : 609bp  
**MF143556**; *Cladosporium tenuissimum* : SR Joshi and Susmita Paul : ITS: Partial : 525bp  
**MF143557**; *Colletotrichum gloeosporioides* : SR Joshi and Susmita Paul : ITS:Partial : 607bp  
**MF143558**; *Lasiodiplodia exigua*: SR Joshi and Susmita Paul : ITS:Partial : 1005bp  
**MF143559**; *Phomopsis* sp.: SR Joshi and Susmita Paul : ITS:Partial : 557bp  
**MF143560**; *Diaporthe phaseolorum*: SR Joshi and Susmita Paul : ITS:Partial : 639bp  
**MF595896**; *Colletotrichum siamense*: SR Joshi and Susmita Paul : ITS:Partial : 579bp  
**MF595897**; *Diaporthe* sp.: SR Joshi and Susmita Paul : ITS:Partial : 561bp  
**MF595898**; *Aspergillus niger* : SR Joshi and Susmita Paul : ITS:Partial : 653bp  
**MF595899**; *Colletotrichum gloeosporioides* : SR Joshi and Susmita Paul : ITS:Partial : 813bp  
**MF595900**; *Aspergillus niger* : SR Joshi and Susmita Paul : ITS:Partial : 568bp  
**MF595901**; *Colletotrichum siamense* : SR Joshi and Susmita Paul : ITS:Partial : 573bp  
**MF595902**; *Pestalotiopsis microspora* : SR Joshi and Susmita Paul : ITS:Partial : 578bp  
**MF595903**; *Phomopsis* sp.: SR Joshi and Susmita Paul : ITS:Partial : 612bp  
**MG214067** : *Hypholoma fasciculare* : SR Joshi and M Borthakur : ITS 1 : Complete : 281 bp

**MG214068** : *Lactifluus glaucescens* : SR Joshi and M Borthakur : ITS 1 : Complete : 204 bp  
**MG214069** : *Russula lepida* : SR Joshi and M Borthakur : ITS 1 : Complete : 230 bp  
**MG214070** : *Retiboletus* sp. : SR Joshi and M Borthakur : ITS 1 : Complete : 233 bp  
**MG214071** : *Echinoderma aspera* : SR Joshi and M Borthakur : ITS 1 : Complete : 326 bp  
**MG214072** : *Suillus ochraceoroseus* : SR Joshi and M Borthakur : ITS 1 : Complete : 255 bp  
**MG214073** : *Gymnomyces fallax* : SR Joshi and M Borthakur : ITS 1 : Complete : 264 bp  
**MG214074** : *Leccinum rugosiceps* : SR Joshi and M Borthakur : ITS 1 : Complete : 242 bp  
**MG214075** : *Amauroderma* sp. : SR Joshi and M Borthakur : ITS 1 : Complete : 249 bp  
**MG214076** : *Lactarius purpureus* : SR Joshi and M Borthakur : ITS 1 : Complete : 277 bp  
**MG214077** : *Gymnopus subnudus* : SR Joshi and M Borthakur : ITS 1 : Complete : 230 bp  
**MG214078** : *Pseudohydnum gelatinosum* : SR Joshi and M Borthakur : ITS 1 : Complete : 223 bp  
**MG214079** : *Amanita lignitincta* : SR Joshi and M Borthakur : ITS 1 : Complete : 251 bp  
**MG214080** : *Amanita griseofolia* : SR Joshi and M Borthakur : ITS 1 : Complete : 275 bp  
**MG214081** : *Amanita spissacea* : SR Joshi and M Borthakur : ITS 1 : Complete : 251 bp  
**MG214082** : *Amanita virgineoides* : SR Joshi and M Borthakur : ITS 1 : Complete : 241 bp  
**MG214083** : *Heterobasidion annosum* : SR Joshi and M Borthakur : ITS 1 : Complete : 234 bp  
**MG214084** : *Scleroderma citrinum* : SR Joshi and M Borthakur : ITS 1 : Complete : 222 bp  
**MG214085** : *Pleurotus ostreatus* : SR Joshi and M Borthakur : ITS 1 : Complete : 204 bp  
**MG214086** : *Inocybe perlata* : SR Joshi and M Borthakur : ITS 1 : Complete : 284 bp  
**MG253008** : *Hypholoma fasciculare* : SR Joshi and M Borthakur : 28S rRNA : Partial : 479 bp  
**MG253009** : *Lactifluus glaucescens* : SR Joshi and M Borthakur : 28S rRNA : Partial : 564 bp  
**MG253010** : *Russula lepida* : SR Joshi and M Borthakur : 28S rRNA : Partial : 597 bp  
**MG253011** : *Retiboletus fuscus* : SR Joshi and M Borthakur : 28S rRNA : Partial : 471 bp  
**MG253012** : *Echinoderma aspera* : SR Joshi and M Borthakur : 28S rRNA : Partial : 584 bp  
**MG253013** : *Suillus bovinus* : SR Joshi and M Borthakur : 28S rRNA : Partial : 422 bp  
**MG253014** : *Gymnomyces nondistincta* : SR Joshi and M Borthakur : 28S rRNA : Partial : 577 bp  
**MG253015** : *Rugiboletus extremiorientalis* : SR Joshi and M Borthakur : 28S rRNA : Partial : 491 bp  
**MG253016** : *Amauroderma* sp. : SR Joshi and M Borthakur : 28S rRNA : Partial : 457 bp  
**MG253017** : *Lactarius olympianus* : SR Joshi and M Borthakur : 28S rRNA : Partial : 600 bp  
**MG253018** : *Gymnopus subnudus* : SR Joshi and M Borthakur : 28S rRNA : Partial : 536 bp  
**MG253019** : *Gymnopus peronatus* : SR Joshi and M Borthakur : 28S rRNA : Partial : 633 bp  
**MG253020** : *Pseudohydnum gelatinosum* : SR Joshi and M Borthakur : 28S rRNA : Partial : 572 bp  
**MG253021** : *Amanita* sp. : SR Joshi and M Borthakur : 28S rRNA : Partial : 612 bp  
**MG253022** : *Amanita griseofolia* : SR Joshi and M Borthakur : 28S rRNA : Partial : 586 bp  
**MG253023** : *Amanita virgineoides* : SR Joshi and M Borthakur : 28S rRNA : Partial : 467 bp  
**MG253024** : *Heterobasidion annosum* : SR Joshi and M Borthakur : 28S rRNA : Partial : 550 bp  
**MG253025** : *Scleroderma citrinum* : SR Joshi and M Borthakur : 28S rRNA : Partial : 536 bp  
**MG253026** : *Pleurotus pulmonarius* : SR Joshi and M Borthakur : 28S rRNA : Partial : 573 bp  
**MG253027** : *Inocybe perlata* : SR Joshi and M Borthakur : 28S rRNA : Partial : 586 bp  
**MG383648** : *Russula lepida* : SR Joshi and M Borthakur : ITS : Complete : 602 bp  
**MG383649** : *Retiboletus* sp. : SR Joshi and M Borthakur : ITS : Complete : 503 bp  
**MG383650** : *Lactifluus vellereus* : SR Joshi and M Borthakur : ITS : Complete : 723 bp

**MG383651:** *Phallus* sp. : SR Joshi and M Borthakur : ITS : Complete : 559 bp  
**MG383652:** *Amauroderma rugosum* : SR Joshi and M Borthakur : ITS : Complete : 549 bp  
**MG383653:** *Suillus bovinus* : SR Joshi and M Borthakur : ITS : Complete : 539 bp  
**MG383654:** *Gymnomyces* sp. : SR Joshi and M Borthakur : ITS : Complete : 398 bp  
**MG383655:** *Leccinum rugosiceps* : SR Joshi and M Borthakur : ITS : Complete : 568 bp  
**MG383656:** *Amauroderma* sp. : SR Joshi and M Borthakur : ITS : Complete : 581 bp  
**MG383657:** *Agrocybe ochracea* : SR Joshi and M Borthakur : ITS : Complete : 788 bp  
**MG383658:** *Lactarius purpureus* : SR Joshi and M Borthakur : ITS : Complete : 658 bp  
**MG383659:** *Heterobasidion annosum* : SR Joshi and M Borthakur : ITS : Complete : 441 bp  
**MG383660:** *Gymnopus subnudus* : SR Joshi and M Borthakur : ITS : Complete : 643 bp  
**MG383661:** *Gymnopus* sp. : SR Joshi and M Borthakur : ITS : Complete : 535 bp  
**MG383662:** *Pseudohydnum gelatinosum* : SR Joshi and M Borthakur : ITS : Complete : 508 bp  
**MG383663:** *Inocybe perlata* : SR Joshi and M Borthakur : ITS : Complete : 570 bp  
**MG383664:** *Amanita lignitincta* : SR Joshi and M Borthakur : ITS : Complete : 499 bp  
**MG383665:** *Suillus luteus* : SR Joshi and M Borthakur : ITS : Complete : 554 bp  
**MG383666:** *Amanita griseofolia* : SR Joshi and M Borthakur : ITS : Complete : 516 bp  
**MG383667:** *Amanita spissacea* : SR Joshi and M Borthakur : ITS : Complete : 579 bp  
**MG383668:** *Amanita virgineoides* : SR Joshi and M Borthakur : ITS : Complete : 651 bp  
**MG383669:** *Amanita spreata* : SR Joshi and M Borthakur : ITS : Complete : 445 bp  
**MH172469:** *Phomopsis* sp. : SR Joshi and Susmita Paul: ITS: Partial : 579 bp  
**MH220722:** *Enterococcus faecalis* : SR Joshi and Koel Biswas: 16S rRNA : Partial : ~1,400 bp  
**MH220723:** *Enterococcus faecalis* : SR Joshi and Koel Biswas: 16S rRNA : Partial : ~1,400 bp  
**MH220724:** *Enterococcus faecalis* : SR Joshi and Koel Biswas: 16S rRNA : Partial : ~1,400 bp  
**MH220725:** *Enterococcus faecalis* : SR Joshi and Koel Biswas: 16S rRNA : Partial : ~1,400 bp  
**MH220726:** *Enterococcus faecalis* : SR Joshi and Koel Biswas: 16S rRNA : Partial : ~1,400 bp  
**MH220727:** *Enterococcus faecalis* : SR Joshi and Koel Biswas: 16S rRNA : Partial : ~1,400 bp  
**MH220728:** *Enterococcus faecalis* : SR Joshi and Koel Biswas: 16S rRNA : Partial : ~1,400 bp  
**MG874760:** *Bacillus altitudinis* KH-16F: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874761:** *Bacillus megaterium* KH-15A: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874762:** *Bacillus albus* KH-13A: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874763:** *Bacillus siamensis* KH-12A: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874764:** *Bacillus siamensis* KH-EA: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874765:** *Bacillus wiedmanii* KH-BB: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874766:** *Bacillus siamensis* KH-11B: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874767:** *Bacillus siamensis* KH-6A: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874768:** *Bacillus siamensis* KH-5: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874769:** *Bacillus velezensis* KH-11C: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874771:** *Bacillus nakamurai* KH-6E: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874772:** *Bacillus pseudomycolides* KH-4: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874773:** *Rhodococcus equi* KH-EE: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874774:** *Serratia marcescens* KH-CC: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp  
**MG874775:** *Paenibacillus chibensis* KH-3A: SR Joshi and Lily Shylla: 16SrRNA:Partial:>1300bp



**MN727110:** *Rhodococcus qingshengii* SC1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727111:** *Exiguobacterium acetylicum* SC2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727112:** *Stenotrophomonas pictorum* SC3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727113:** *Exiguobacterium artemiae* SC4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727114:** *Comamonas jiangduensis* SC5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727115:** *Pseudarthrobacter oxydans* SC6: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727116:** *Streptomyces olivaceus* SC7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727117:** *Bacillus tequilensis* WC1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727118:** *Haemophilus piscium* WC4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727119:** *Pseudomonas mohnii* WC5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727120:** *Pseudomonas helmanticensis* WC6: SR. Joshi and U. Chettri: 16SrRNA: Parti: ~1400al  
**MN727121:** *Pseudomonas simiae* WC7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727122:** *Pseudomonas migulae* WC8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727123:** *Pseudomonas hunanensis* WC9: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727124:** *Pseudomonas simiae* WC11: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727125:** *Acinetobacter oryzae* WC13: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727126:** *Brevundimonas vesicularis* WC14: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727127:** *Ideonella paludis* WC16: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727128:** *Sphingomonas echinoides* WC17: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727129:** *Pseudomonas fuscovaginae* WC18: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN727130:** *Roseateles terrae* WC19: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733078:** *Pseudomonas furukawaii* SS1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733079:** *Psychrobacillus lasiicapitis* SS2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733080:** *Acidovorax delafieldii* SS3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733081:** *Paenarthrobacter ureafaciens* SS4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733082:** *Pseudomonas furukawaii* SS5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733083:** *Diaphorobacter polyhydroxybutyratorans* SS6: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733084:** *Paenarthrobacter ureafaciens* SS7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733085:** *Bosea vestrisii* SS8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733086:** *Lactococcus lactis* subsp. *lactis* WS1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733087:** *Serratia marcescens* subsp. *marcescens* WS2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733088:** *Glutamicibacter mysorens* WS3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733089:** *Aeromonas caviae* WS4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733090:** *Microbacterium hydrothermale* WS6: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733091:** *Microbacterium hydrothermale* WS7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733092:** *Massilia buxea* WS8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733093:** *Pseudomonas paralactis* WS9: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733094:** *Vogesella perlucida* WS10: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733095:** *Pseudomonas kribbensis* WS11: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733096:** *Acinetobacter johnsonii* WS12: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733097:** *Microbacterium oxydans* WS14: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
**MN733098:** *Acinetobacter johnsonii* WS15: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733099: *Brevundimonas vesicularis* WS16: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733100: *Pseudomonas kribbensis* WS19: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733101: *Stenotrophomonas pictorum* SR1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733102: *Glutamicibacter mysorens* SR2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733103: *Acinetobacter tandoii* SR3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733104: *Micrococcus aloeverae* SR4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733105: *Acinetobacter tandoii* SR5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733106: *Deinococcus wulumuqiensis* SR6: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733107: *Kocuria palustris* WR1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733108: *Comamonas terrigena* WR2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733109: *Chryseobacterium culicis* WR3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733110: *Kocuria palustris* WR4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733111: *Acinetobacter tjernbergiae* WR5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733112: *Myroides marinus* WR7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733113: *Stenotrophomonas terrae* WR8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733114: *Pseudomonas monteilii* WR9: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733115: *Chryseobacterium endophyticum* WR10: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733116: *Bacillus aryabhatai* WR11: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733117: *Staphylococcus edaphicus* WR12: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733118: *Chromobacterium vaccinii* WR13: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733119: *Comamonas testosteroni* WR14: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733120: *Acinetobacter oleivorans* WR15: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733121: *Chromobacterium vaccinii* WR16: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733122: *Streptomyces racemochromogenes* WR18: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733214: *Glutamicibacter mysorens* ST2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733215: *Pseudomonas monteilii* ST3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733216: *Aeromonas caviae* ST4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733217: *Diaphorobacter polyhydroxybutyrativorans* ST5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733218: *Bosea vestrisii* ST6: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733219: *Pseudoxanthomonas japonensis* WT1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733220: *Cellulosimicrobium aquatile* WT2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733221: *Bacillus toyonensis* WT3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733222: *Chryseobacterium endophyticum* WT4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733223: *Microbacterium gorillae* WT5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733224: *Serratia marcescens* subsp. *sakuensis* WT6: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733225: *Serratia marcescens* subsp. *sakuensis* WT7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733226: *Lysinibacillus xylanilyticus* WT8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733227: *Micrococcus yunnanensis* WT9: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733228: *Arthrobacter pascens* WT10: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733229: *Myroides xuanwuensis* WT12: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733230: *Acinetobacter tjernbergiae* WT13: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400  
MN733231: *Glutamicibacter halophytocola* WT14: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733232: *Klebsiella pneumoniae* subsp. *rhinoscleromatis* WT16: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733233: *Serratia marcescens* subsp. *sakuensis* WT17: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733234: *Microbacterium indicum* WT18: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733235: *Lactococcus lactis* subsp. *lactis* WT19: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733236: *Brevibacterium iodinum* WT20: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733237: *Bacillus subtilis* subsp. *stercoris* WT21: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733238: *Novosphingobium pokkali* WT22: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733239: *Chromobacterium piscinae* WT23: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733240: *Deinococcus grandis* WT24: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733329: *Exiguobacterium profundum* SRK2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733330: *Bacillus subtilis* subsp. *stercoris* SRK3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733331: *Pseudomonas monteilii* SRK4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733332: *Bacillus marisflavi* SRK5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733333: *Acinetobacter baumannii* SRK7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733334: *Paenarthrobacter ureafaciens* SRK8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733335: *Rhizobium radiobacter* SRK9: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733336: *Stenotrophomonas acidaminiphila* SRK10: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733337: *Hydrogenophaga atypica* SRK11: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733338: *Pseudomonas alcaligenes* SRK12: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733339: *Pseudomonas alcaligenes* SRK14: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733340: *Serratia marcescens* subsp. *sakuensis* WRK1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733341: *Exiguobacterium acetylicum* WRK2: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733342: *Pseudomonas extremaustralis* WRK3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733343: *Staphylococcus sciuri* WRK4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733344: *Enterobacter tabaci* WRK7: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733345: *Pseudomonas simiae* WRK8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733346: *Aeromonas hydrophila* subsp. *hydrophila* WRK9: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733347: *Chromobacterium rhizoryzae* WRK10: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733348: *Micrococcus yunnanensis* WRK11: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733349: *Dermacoccus nishinomiyaensis* WRK12: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733350: *Micrococcus aloeverae* WRK13: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733351: *Kocuria palustris* WRK14: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733352: *Aquicola tertiaricarbonis* WRK15: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733353: *Pseudomonas paralactis* WRK16: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN733354: *Serratia marcescens* subsp. *sakuensis* WRK17: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726744: *Exiguobacterium artemiae* SG1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726745: *Arthrobacter ramosus* SG3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726746: *Arthrobacter citreus* SG4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726747: *Cryobacterium arcticum* SG8: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726748: *Arthrobacter pityocampae* SG10: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726749: *Arthrobacter ginsengisoli* SG14: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726750: *Flavobacterium tiangeerense* WG1: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726751: *Brevundimonas mediterranea* WG3: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726752: *Acinetobacter tjernbergiae* WG4: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

MN726753: *Arthrobacter ruber* WG5: SR. Joshi and U. Chettri: 16SrRNA: Partial: ~1400

## List of accessions obtained for Microbial Markers from National Centre for Biotechnology

### Information(NCBI), USA:

JN230520	JN230521	JN230522	JN408704	JN408705	JN408706	JN408707
JN408708	JF827349	JF827350	JF827351	JF827352	JF827353	JF827354
KU258198	KU258199	KU258200	KU258201	KU258202	KU258203	KU258204
KU258205	KU258206	KU258207	KU258208	KU258209	KU258210	KU258211
KU258212	KU258213	KU258214	KU258215	KU258216	KU258217	KU258218
KU258219	KU258220	KU258221	KU258222	KU258223	KU258224	KU258225
KU258226	KU258227	KU258228	KU258229	KU258230	KU258231	KU258232
KU258233	KU761254	KU258234	KU258235	KU258236	KU258237	KU258238
KU258239	KU258240	KU258241	KU258242	KU258243	KU258244	KU258245
KU258246	KU258247	KU258248	KU258249	KU258250	KU258251	KU258252
KU258253	KU258254	KU258255	KU258256	KU258257	KU258258	KU258259
KU258260	KU258261	KU258262	KU258263	KU258264	KU258265	KU258266
KU258267	KU258268	KU258269	KU258270	KU258272	KU258273	KU258274
KU258275	KU258276	KU25827	KU258278	KU258279	KU258280	KU258281
KU258282	KU258283	KU258284	KU258285	KU258286	KU258287	KU258288
KU25828	KU258290	KU258291	KU761252	KU761253	KU258292	KU258293
KU258294	KU258295	HQ728330	HQ728331	HQ728333	HQ728324	JN104057
JN029837	JN029833	JF827598	HQ728335	JN029838	HQ728336	HQ728325
JN029835	HQ728328	JN104059	JN104058	HQ728327	HQ728329	JN104061
JN029834	JN029832	JQ770189	JQ770190	JQ770191	JQ770192	JQ770193
JQ770194	JQ770195	HQ728326	HQ728332	HQ728334	JN029831	JN029836
JN104056	JN104060	KM282281	KM282282	KM282283	KM282284	KM282285
KM282286	KM282287	KM282288	KP843880	KP843881	KP843882	KP843883
KP843884	KP877447	KM983609	KM983610	KX831664	KX831667	KX011029
KX831665	KX831666	JN600358	JN600359	JN600360	JN600361	JN600362.1
JN600363.1	JN600364.1	JN600365.1	JN600366.1	JN600367.1	JN600368.1	JN600369.1
JN600370.1	JN600371.1	JN600372.1	JN600373.1	JN600374.1	JN600375.1	JN600376.1
JN600377.1	JN600378.1	JN600379.1	JN600380.1	JN600381.1	JN600382.1	JN600383.1
JN600384.1	JN600385.1	JN600386.1	JN600386.1	JN600387.1	JN600388.1	JN600389.1
JN600390.1	JN600391.1	JN600392.1	JN600393.1	JN600394.1	JN600395.1	JN600396.1
JN600397.1	JN600398.1	JN600399.1	JN600400.1	JN600401.1	JN600402.1	JN600403.1
JN600404.1	JN600405.1	JN600406.1	JN600407.1	JN600408.1	JN600409.1	JN600410.1
JN600411.1	JN600412.1	JN600413.1	JN600414.1	JN600415.1	JN600416.1	JN600417.1
JN600418.1	JN600419.1	JN600420.1	JN600421.1	JN600422.1	JN600423.1	JN600424.1
JN600425.1	JN600426.1	JN600427.1	JN600428.1	JN600429.1	JN600430.1	JN600431.1

JN600432.1	JN600433.1	JN600434.1	JN600435.1	JN600436.1	JN600437.1	JN600438.1
JN600439.1	JX040437	JX040438	JX040439	JX040440	JX040441	JX040442
JX040443	JX040444	JX040445	JX040446	JX040447	JX144942	JX144943
JX144944	JX144945	JX144946	JX144947	JX144948	JX144949	JX144950
JX144951	JX144952	JX144953	JX144954	JX144955	JX144956	JX144957
JX144958	JX144959	JX144960	JX298811	JX298812	KF515731	KF515732
KF515733	KF515734	KF515735	KF515736	JN408709	JN408710	JN408711
JN408712	JN408713	JN247756	JQ256456	JQ256457	JQ256458	JQ256459
JQ256460	JQ256461	JQ256462	JQ256463	KF928279	KF928280	KF928281
KF928284	KM282291	KF928283	KF928286	KF928287	KF928288	KF928292
KF928289	KF928290	KF928285	KF928291	KF928293	KM282289	KM282290
KP178686	KP178687	KP178688	KP178689	KP178690	KP178691	KP178692
KP178693	KP178694	KP178695	KP178696	KP178697	KP178698	KP178699
JN660056	JN660057	JN660058	JN660060	JX026015	JX026016	JX026017
JX026018	JX026019	JX026020	JX026021	JX026022	JX026023	JX026024
JX026025	JX026026	JX026027	JX026028	JX026029	JX026030	JX026031
JX026032	JX026033	JX026035	JX026036	JX026037	JX026009	JX026010
JX026011	JX026012	JX026013	JX026014	JX026034	JN660075	JX026003
KF186666	JN660061	JN660062	JN660063	JN660064	JF910013	JF910014
JF910015	JF910016	JX026006	JX026007	JN660068	JN660069	JN660070
JN660071	JF910017	JF910020	JN660065	JN660066	JN660067	JN660072
JF910018	KF186667	KF186668	KF186669	KF186670	KF186671	KF186672
JX026004	JX026005	KF186664	KF186665	JF910019	JX026008	JN860201
JN660059	JN860202	JN860203	JN860204	JN860205	JN860206	JN860207
JN860208	JN860209	JN660073	JN660074	JN660076	KX896657	KX896658
HM448979	HM448980	HM448981	HM448982	HM448983	HM448984	HM448985
HM448986	HM448987	JN24776	JN247762	JN247763	JN247764	JN247765
JN247766	JN247767	JN247768	JN247769	JN247770	JN247771	JN247772
JN247773	JN247774	JN247775	JN247776	JQ074037	JQ074038	JQ074039
HM448988	HM448989	HM448990	HM448991	HM448992	HM448993	HM991825
HM991826	HM991827	HQ696505	HQ696506	JF804769	JQ074040	JQ074041
JQ074042	JQ074055	JQ074056	HM747949	HM747950	JN695728	JN653472
JN653473	JN628283	JN247777	JN247778	JN628284	JN418876	JN418877
JN628285	JN418878	JN418879	JN247781	JN418880	JN418881	JN418882
JN628286	JN247782	JN418883	JN418884	EU579531	HM569608.1	HM569609.1
HM569610.1	HM569611.1	HM569612.1	HM581667.1	HM581668.1	HM581669.1	HM581670.1
HM581671.1	HM596779.1	HM596780.1	HM596781.1	HM596782.1	HM596783.1	KT318608
KT318609	KT318610	KT318611	KT318612	KT318613	KT318614	KT318615
KT318616	GQ468395	GQ468396	GU270571	HQ232299	JF768706.1	JF768707.1
JF768708.1	JF768709.1	JF768710.1	JF768711.1	JF768711.1	JF768712.1	JF768713.1
JF768713.1	JF768714.1	JF768715.1	JF768716.1	JF768717.1	JF768718.1	JF768719.1
JF768720.1	JF768721.1	JF768722.1	JF768723.1	JF768724.1	JF768725.1	JF768726.1

JF768727.1	JF768728.1	JF768729.1	JF768730.1	JF768731.1	JF768732.1	JF768733.1
JF768734.1	JF768735.1	JF768736.1	JF768737.1	JN164000	JN164001	JN164002
JN164003	JN164004	JN164006	JN164007	JN230423	GQ468397	GU270570
HM747953	HM747951	HM747952	HQ232300	GQ468398	GU270572	GU270569
GQ468401	GU270568	GQ468400	GU270567	HM747950	HM769816.1	HM769817.1
HQ600965.1	HQ600966.1	HQ600967.1	HQ600968.1	HQ600969.1	HQ600970.1	HQ600971.1
HQ600972.1	HQ600973.1	HQ600974.1	HQ600975.1	HQ600976.1	HQ600977.1	HQ600978.1
HQ600979.1	HQ600980.1	HQ600981.1	HQ600982.1	HQ600983.1	HQ600984.1	JF927992.1
JF927993.1	JF927994.1	JF968421.1	JF968422.1	JF968423.1	JF968424.1	JF968425.1
JF968426.1	JF968427.1	JF968428.1	JF968429.1	JF968430.1	JF968431.1	JF968432.1
JF968433.1	JF968434.1	JF968435.1	KF293400.1	KF293401.1	KF636761.1	KJ411941.1
KJ411942.1	KJ411943.1	KJ411944.1	KJ411945.1	KJ411946.1	KJ411947.1	KJ411948.1
KJ411949.1	KJ411950.1	KJ411951.1	KJ411952.1	KJ411953.1	KJ411954.1	KJ411955.1
KJ411956.1	KJ411957.1	KJ411958.1	KJ411959.1	KJ411960.1	KJ411961.1	KJ411962.1
KJ411963.1	KJ411964.1	KJ411965.1	KJ411966.1	KJ411967.1	KJ411968.1	KJ411969.1
KJ411970.1	KJ411971.1	KJ411972.1	JX402416	JX402417	JX402418	JX402419
JX402420	JX402421	JX402422	JX402423	JX402424	JX402425	JX402426
JX402427	JX402428	JX402429	JX402430	JX402431	JX402432	JX402433
JX402434	JX402435	JX402436	JX402437	JX402438	JX402439	JX402440
JX402441	KF874290	KF874291	KF874292	KF874293	KF874294	KF874295
KF874296	KF874297	KF874298	KF874299	KF874300	KF874301	KF874302
KF874303	KF874304	KF874305	KF874306	KF874307	KF874308	KF874309
KF874310	KF874311	KF874312	KF874313	KF874314	KF874315	KF874316
KF874317	KF874318	KF874319	KF874320	JX469423	JX853767	JX469424
JX853766	JX469419	JX469420	JX469421	JX469422	JX853765	KF358718
KF358719	KF358720	JN040731	JN247750	JN040743	JN040746	JN040747
JN247760	JN040728	JN040733	JN040744	JN040737	JN040748	JN040735
JN040739	JN040738	JN247757	JN040741	JN040749	JN040745	JN247755
JN247749	JN040732	JN040730	JN040736	JN860210	JN247752	JN247758
JN247753	JN247751	JQ256464	JQ256465	JQ256466	JQ256467	JQ256468
JQ256469	JQ256470	JQ256473	JQ256474	JQ256475	JQ074019	JQ074020
JQ074021	JQ074022	JQ074023	JQ074024	JQ074025	JQ074026	JQ074027
JQ074028	JQ074029	JQ074030	JQ074031	JQ074032	JQ074033	JQ074034
JQ074036	JQ281523	JQ281524	JQ281525	JQ281526	JQ281527	JQ281528
JQ281529	JQ281530	JQ281531	JQ824836	JQ824837	JQ824838	JQ824839
JQ824840	JF927993	JF968421	JF968422	JF968423	JF968424	JF968425
JF968426	JF968429	JF968433	JF968434	HQ600965	HQ600968	HQ600969
HQ600971	HQ600972	HQ600973	HQ600974	HQ600975	HQ600976	HQ600977
HQ600978	HQ600979	HQ600980	HQ600981	HQ600982	HQ600984	HQ141620
HQ141621	HQ141622	HQ141623	HQ141624	JN680705	JN680706	JN680707
JN680708	HQ141625	JF804773	JF804774	JF804770	JF804771	JN680696
JF804772	JN255522	JN255524	JN255521	JN255525	JN255523	JN680701

JN680702	JN680697	JN680698	JN680699	JN680700	JN680703	JN680704
KC478503	KC478504	KC478505	KC478506	KC478507	KC478508	KC478509
KC478510	KC478511	KC478512	KC478513	KC478514	KC478515	HQ141620
HQ141621	HQ141622	HQ141623	HQ141624	JN680705	JN680706	JN680707
JN680708	HQ141625	JF804773	JF804774	JF804770	JF804771	JN680696
JF804772	JN255522	JN255524	JN255521	JN255525	JN255523	JN680701
JN680702	JN680697	JN680698	JN680699	JN680700	JN680703	JN680704
KC478503	KC478504	KC478505	KC478506	KC478507	KC478508	KC478509
KC478510	KC478511	KC478512	KC478513	KC478514	KC478515	JX188047
JX188046	JX188048	JX500091	JX500092	JX500093	JX500094	X500095
JN613282	JN613283	JN628288	JN628290	JN628291	JN628292	JX298807
JN585959	JN585960	JN418870	JX390622	JN653461	JN418873	JQ236632
JQ770186	JQ281538	JQ281539	JQ007727	JQ281541	JQ770187	JQ770188
JQ236625	JQ446440	JQ446442	JQ074052	JQ074054	JQ292906	JN585958
JX298809	JX390623	JN418875	JX390624	JN680692	KC841158	KC841160
KC841161	KC841162	KC841159	KX951469	KX951470	KX951471	KX951472
KX951473	KX951474	KX951475	KX951476	KX951477	KX951478	KX951479
KX951480	KX951481	KX951482	KX951483	JN600439.1	JN600438.1	JN600437.1
JN600436.1	JN600435.1	JN600434.1	JN600433.1	JN600432.1	JN600431.1	JN600430.1
JN600429.1	JN600428.1	JN600427.1	JN600426.1	JN600425.1	JN600424.1	JN600423.1
JN600422.1	JN600421.1	JN600420.1	JN600419.1	JN600418.1	JN600417.1	JN600416.1
JN600415.1	JN600414.1	JN600413.1	JN600412.1	JN600411.1	JN600410.1	JN600409.1
JN600408.1	JN600407.1	JN600406.1	JN600405.1	JN600404.1	JN600403.1	JN600402.1
JN600401.1	JN600400.1	JN600399.1	JN600398.1	JN600397.1	JN600396.1	JN600395.1
JN600394.1	JN600393.1	JN600392.1	JN600391.1	JN600390.1	JN600389.1	JN600388.1
JN600387.1	JN600386.1	JN600385.1	JN600384.1	JN600383.1	JN600382.1	JN600381.1
JN600380.1	JN600379.1	JN600378.1	JN600377.1	JN600376.1	JN600375.1	JN600374.1
JN600373.1	JN600372.1	JN600371.1	JN600370.1	JN600369.1	JN600368.1	JN600367.1
JN600366.1	JN600365.1	JN600364.1	JN600363.1	JN600362.1	JN600361.1	JN600360.1
JN600359.1	JN600358.1	KY216110	KY216111	KY216112	KY216113	KY216114
KY216115	KY216116	KY216117	KY216118	KY216119	KY216120	KY216121
KY216122	KY216123	KY216124	KY216125	KY216126	KY216127	KY216128
KY216129	KY216130	KY216131	KY216132	KY594002	KY594003	KY594004
KY883344	KX011029	KX953851	AJ575658	JF768708	MG234433	MG234434
MG234435	MG234436	MG234437	MG234438	MG234439	MG234440	MG234441
MG234442	MG234443	MG234444	MG234445	MG234446	MG234447	MG234448
MG234449	MG181224	MF564074	MF564075	MF564076	MF564077	MF564078
MF564079	MF564080	MF564081	MF564082	MF564083	MF564084	MF564085
MF564086	MF564087	MF564088	MF564089	MF564090	MF564091	MF564092
MF564093	MF564094	MF564095	MF564096	MF564097	MF564098	MF564099
MF564100	MF564101	MF564102	MF564103	MF564104	MF564105	MF564106
MF564107	MF564108	MF564109	MF564110	MF564111	MF143554	MF143555

MF143556	MF143557	MF143558	MF143559	MF143560	MF595896	MF595897
MF595898	MF595899	MF595900	MF595901	MF595902	MF595903	MG214067
MG214068	MG214069	MG214070	MG214071	MG214072	MG214073	MG214074
MG214075	MG214076	MG214077	MG214078	MG214079	MG214080	MG214081
MG214082	MG214083	MG214084	MG214085	MG214086	MG253008	MG253009
MG253010	MG253011	MG253012	MG253013	MG253014	MG253015	MG253016
MG253017	MG253018	MG253019	MG253020	MG253021	MG253022	MG253023
MG253024	MG253025	MG253026	MG253027	MG383648	MG383649	MG383650
MG383651	MG383652	MG383653	MG383654	MG383655	MG383656	MG383657
MG383658	MG383659	MG383660	MG383661	MG383662	MG383663	MG383664
MG383665	MG383666	MG383667	MG383668	MG383669	MH172469	MH220722
MH220723	MH220724	MH220725	MH220726	MH220727	MH220728	MG874760
MG874761	MG874762	MG874763	MG874764	MG874765	MG874766	MG874767
MG874768	MG874769	MG874771	MG874772	MG874773	MG874774	MG874775
MN727110	MN727111	MN727112	MN727113	MN727114	MN727115	MN727116
MN727117	MN727118	MN727119	MN727120	MN727121	MN727122	MN727123
MN727124	MN727125	MN727126	MN727127	MN727128	MN727129	MN727130
MN733078	MN733079	MN733080	MN733081	MN733082	MN733083	MN733084
MN733085	MN733086	MN733087	MN733088	MN733089	MN733090	MN733091
MN733092	MN733093	MN733094	MN733095	MN733096	MN733097	MN733098
MN733099	MN733100	MN733101	MN733102	MN733103	MN733104	MN733105
MN733106	MN733107	MN733108	MN733109	MN733110	MN733111	MN733112
MN733113	MN733114	MN733115	MN733116	MN733117	MN733118	MN733119
MN733120	MN733121	MN733122	MN733214	MN733215	MN733216	MN733217
MN733218	MN733219	MN733220	MN733221	MN733222	MN733223	MN733224
MN733225	MN733226	MN733227	MN733228	MN733229	MN733230	MN733231
MN733232	MN733233	MN733234	MN733235	MN733236	MN733237	MN733238
MN733239	MN733240	MN733329	MN733330	MN733331	MN733332	MN733333
MN733334	MN733335	MN733336	MN733337	MN733338	MN733339	MN733340
MN733341	MN733342	MN733343	MN733344	MN733345	MN733346	MN733347
MN733348	MN733349	MN733350	MN733351	MN733352	MN733353	MN733354
MN726744	MN726745	MN726746	MN726747	MN726748	MN726749	MN726750
MN726751	MN726752	MN726753	HQ232299	GQ468396	GQ468395	JN164001
JF768711	JF768713	JF768715	JF768710	JN164004	JF768712	JF768714
JF768718	JN164000	JN164003	JN164007	JF768717	JN164002	JN230423
GU270571	JF768722	JF768731	JN164005	JN164006	JF768721	JF768725
JF768729	JF768728	JF768730	JF768724	JF768726	JF768727	JF768723
JF768706	JF768709	JF768708	JF768707	JF768719	JF768720	JF768732
GQ468397	GU270570	HM747953	HM747951	HM747952	HQ232300	Q468398
GU270572	GU270569	GQ468401	GU270568	GQ468400	GU270567	M747950
HM747949	HM747954	HM747955	JF768716	JF768733	JF768734	JF768737



JF768735	JF768736	JN600439.1	JN600439.2	JN600439.3	JN600439.4	JN600439.5
JN600439.6	JN600439.7	JN600439.8	JN600439.9	JN600439.10	JN600439.11	JN600439.12
JN600439.13	JN600439.14	JN600439.15	JN600439.16	JN600439.17	JN600439.18	JN600439.19
JN600439.20	JN600439.21	JN600439.22	JN600439.23	JN600439.24	JN600439.25	JN600439.26
JN600439.27	JN600439.28	JN600439.29	JN600439.30	JN600439.31	JN600439.32	JN600439.33
JN600439.34	JN600439.35	JN600439.36	JN600439.37	JN600439.38	JN600439.39	JN600439.40
JN600439.41	JN600439.42	JN600439.43	JN600439.44	JN600439.45	JN600439.46	JN600439.47
JN600439.48	JN600439.49	JN600439.50	JN600439.51	JN600439.52	JN600439.53	JN600439.54
JN600439.55	JN600439.56	JN600439.57	JN600439.58	JN600439.59	JN600439.60	JN600439.61
JN600439.62	JN600439.63	JN600439.64	JN600439.65	JN600439.66	JN600439.67	JN600439.68
JN600439.69	JN600439.70	JN600439.71	JN600439.72	JN600439.73	JN600439.74	JN600439.75
JN600439.76	JN600439.77	JN600439.78	JN600439.79	JN600439.80	JN600439.81	JN600439.82
EU159585	HM448979	HM448980	HM448981	HM448982	HM448983	HM448984
M448985	HM448986	HM448987	HM448988	HM448989	HM448990	HM448991
HM448992	HM448993	HM991825	HM991826	HM991827	HQ696505	HQ696506
JF804769	JN247761	JN247762	JN247763	JN247764	JN247765	JN247766
JN247767	JN247768	JN247769	JN247770	JN247771	JN247772	JN247773
JN247774	JN247775	JN247776	HM747949	HM747950	HM747951	HM747952
HM747953	HM747954	HM747955	JN695728	JN653472	JN653473	JQ074037
JQ074038	JQ074039	JQ074040	JQ074041	JQ074042	JQ074055	JQ074056
MG557729	JN247777	JN247778	JN247779	JN247780	JN247781	JN247782
JN418876	JN418877	JN418878	JN418879	JN418880	JN418881	JN418882
JN418883	JN418884	JN987146	JN987147	JN987148	JN987149	JN987150
JQ074009	JQ074010	JQ074011	JQ074012	JQ074013	JQ074014	JQ074015
JQ074016	JQ074017	JQ074018	JQ322825	JQ322826	JQ322827	JQ322828
JQ322829	JQ322830	JQ322831	JQ322832	JQ322833	JQ322834	JQ322835
JQ681219	JQ681220	JQ681221	JQ681222	JQ681223	JQ681224	JQ681225
JQ681226	JQ681227	JQ681228	JQ681229	JQ681230	JQ681231	JQ681232
JQ681233	HQ437164	HQ437165	HQ437166	HQ437167	HQ437168	JN247741
JN247742	JN247743	JN247744	JN247745	JN247746	JN247747	JN247748
JN987151	JN987152	JN987153	JN987154	JN987155	HQ728324	HQ728325
HQ728326	HQ728327	HQ728328	HQ728329	HQ728330	HQ728331	HQ728332
HQ728333	HQ728334	HQ728335	HQ728336	JF827598	JN029831	JN029832
JN029833	JN029834	JN029835	JN029836	JN029837	JN029838	JN104056
JN104057	JN104058	JN104059	JN104060	JN104061	HQ728324	JN408703
JN408704	JN408705	JN408706	JN408707	JN408708	JF827349	JF827350
JF827351	JF827352	JF827353	JF827354	JX040437	JX040438	JX040439
JX040440	JX040441	JX040442	JX040443	JX040444	JX040445	JX040446
JX040447	JX144942	JX144943	JX144944	JX144945	JX144946	JX144947
JX144948	JX144949	JX144950	JX144951	JX144952	JX144953	JX144954
JX144955	JX144956	JX144957	JX144958	JX144959	JX144960	JX298811
JX298812	KF515731	KF515732	KF515733	KF515734	KF515735	KF515736

JN695728	JN653472	JN653473	JN660076	JN660058	JN660059	JN660061
JX026035	JF910016	JN660070	JX026016	JX026019	JX026026	JF910014
JN860205	JX026025	JX026034	JX026005	JN660072	JX026004	JF910017
JN660075	JN660056	JN660057	JX026009	JX026010	JN660060	JN660068
JN660065	JN660066	JN660067	JX026014	JX026006	JX026007	JX026008
JN860208	JN860207	JN860203	JN860209	JN660062	JN660073	JN860206
JN660063	KF186671	KF186672	KF186667	JX026015	JX026017	JX026018
JX026020	JX026021	JX026022	JX026023	JX026024	JX026027	JX026028
JX026029	JX026030	JX026031	JX026032	JX026033	JX026036	JX026037
JX026011	JX026012	JX026013	JX026003	KF186666	JN660064	JF910013
JF910015	JN660069	JN660071	JF910020	JF910018	KF186667	KF186668
KF186669	KF186670	KF186664	KF186665	JF910019	JN860201	JN860202
JN860204	JN660074	KC841158	KC841160	KC841161	KC841162	KC841159
KU761252	KU761253	KU761254	KU258198	KU258199	KU258200	KU258201
KU258202	KU258203	KU258204	KU258205	KU258206	KU258207	KU258208
KU258209,	KU258210	KU258211	KU258212	KU258213	KU258214	KU258215
KU258216	KU258217	KU258218	KU258219	KU258220	KU258221	KU258222
KU258223	KU258224	KU258225	KU258226	KU258227	KU258228	KU258229
KU258230	KU258231	KU258232	KU258233	KU258234	KU258235	KU258236
KU258237	KU258238	KU258239	KU258240	KU258241	KU258242	KU258243
KU258244	KU258245	KU258246	KU258247	KU258248	KU258249	KU258250
KU258251	KU761252	KU258253	KU761254	JN408706	JN408707	MG874763
MG874764	MG874765	MG874766	MG874767	MG874768	MG874769	MG874771
MG874772	MG874773	MG874774	MG874775	MG874763	MG874774	MG874760
MK373750	MK373751	MK373752	MK373753	MK373754	MK373755	MK373755
MK373756	MK373757	MK373761	MK373763	MK373764	MK373765	KX896657
KX896658	MK634657	MK554505	MK554507	MK554502	MK554503	MK554506
MK634660	MK634662	MK634658	MK634659	MK634661	OK090491	OK090492
OK090493	OK090494	OK090495	OK090496	OK090497	OK090498	OK090499
OK090500	OK090501	OK090502	OK090503	OK090504	OK090505	OK090506
OK090511	OK090512	OK090513	OK090514	OK090515	OK090516	OK090517
OK090518	OK090519	OK090520	OK090521	OK090522	OK090551	OK090552
OK090553	OK090554	OK090555	OK090556	OK090557	OK090558	OK090559
OK090560	OK090561	OK090562	OK090563	OK090564	OK090565	OK090566
OK090567	OK090568	OK090569	OK090524	OK090525	OK090526	OK090527
OK090528	OK090529	OK090530	OK090531	OK090532	OK090533	OK090534
OK090535	OK090536	OK090537	OK090538	OK090539	OK090540	OK090541
OK090542	OK090543	OK090544	OK090545	OK090595	OK090596	OK090597
OK090598	OK090599	OK090600	OK090601	OK090602	OK090603	OK090604
OK090605	OK090606	OK090607	OK090608	OK090609	OK090610	OK090611
OK090612	OK090613	OK090614	OK090615	OK090616	OK090617	OK090618
OK090572	OK090573	OK090574	OK090575	OK090576	OK090577	OK090578

OK090579	OK090580	OK090581	OK090582	OK090583	OK090584	OK090585
OK090586	OK090587	OK090588	OK090589	OK090590	OK090591	OK090592
OK090593	OK090594	OM956341	OM956342	OM956343	OM956344	OM956345
ON614829	ON614830	ON614831	ON614832	ON614833	ON614834	ON614835
ON614836	ON614837	ON614838	OM956341	OM956342	OM956343	OM956344
OM956345	ON614829	ON614830	ON614831	ON614832	ON614833	ON614834
ON614835	ON614836	ON614837	ON614838	MZ144200	MZ144212	MZ145251
MZ144213	MZ144216	MZ144220	OL588275	MZ144222	OL588276	OL588277
OL588278	OL588279	OL588280	OL588281	OL588282	OL588283	OL588284
OL588285	OL588286	OL588287	OL588289	OL588290	OL588291	OL588292
OL588293	OL588294	OL588295	OL588296	OL588297	OL588298	OL588298
OL588299	OL588300	OL588301	OL588302	OL588303	OL588304	OL588305
OL588306	OL588307	OL588308	OL588309	OL588310	OL588311	OL588312
OL588313	OL455726	OL588314	OL588315	OL588316	MW786668	OL588319
OL588320	OL588321	OL588322	OL588323	OQ597171	OQ597172	OQ597173
OQ597174	OQ597175	OQ597176	OQ597177	OQ597178	OQ597179	OQ597180
OQ597181	OQ597182	OQ597183	OQ597184	OQ597185	OQ597186	OQ597187
OQ597188	OQ597189	OQ597190	OQ597191	OQ597192	OQ597193	OQ597194
OQ597195	OQ597196					