

## LIST OF PLANT DISCOVERED IN 2011

During the year 2011, the plant taxonomists of BSI and other institutes have discovered

11 genera

163 species and nothospecies

25 infra specific taxa as new to science from India and

3 genera

72 species

10 infra specific taxa as new records for Indian Flora

### SEED PLANTS

Seed plants (Spermatophytes) are the most evolved land plants on earth and are traditionally divided into flowering plants (or angiosperms) and gymnosperms. In the present state of our knowledge India has about 17,817 species of angiosperms and 74 species of gymnosperms. Many more are yet to be identified and described. The collated information presented here includes 02 new genera from Himalayas (one each from Uttarakhand and Sikkim); 36 new species (08 from Maharashtra, 05 from Arunachal Pradesh, 04 each from Kerala and Tamil Nadu, 03 each from Karnataka and Uttarakhand, 02 each from Jammu & Kashmir and Andaman & Nicobar Islands; 01 each from Andhra Pradesh, Gujarat, Nagaland, Odisha, and Rajasthan). 18 infra specific taxa (01 new subspecies, 16 new varieties, 01 new forma) and 32 new distributional records from India.

### NEW GENUS

**Devendraea** Pusalkar. *Taiwania* 56(3): 210. 2011. (CAPRIFOLIACEAE)

**Pseudoyoungia** D. Maity & Maiti, *Comp. Newsl.* 48. 2010. (ASTERACEAE)

### NEW SPECIES

**Archidendron arunachalense** S.S.Dash & Sanjappa, *Nelumbo* 53: 8. 2011. (LEGUMINOSAE: MIMOSOIDEAE)

**Archidendron nielsenianum** S.S.Dash & Sanjappa, *Nelumbo* 53: 8. 2011. (LEGUMINOSAE: MIMOSOIDEAE)

**Axyris mira** Sukhor., *Willdenowia* 41(1): 76. 2011. (CHENOPODIACEAE)

**Berberis rawatii** U.L.Tiwari & B. S.Adhikari, Nordic J. Bot. 29(2): 185. 2011. (BERBERIDACEAE)

**Brachystelma pullaiahii** Ravi Prasad Rao, Prasad, Sadasivaiah, Khadar Basha, Suresh Babu and Prasanna, Taiwania 56(3): 223. 2011. (APOCYNACEAE)

**Canscora devendrae** R. Kr. Singh & Diwakar, Indian J. Forest. 34(2): 249. 2011. (GENTIANACEAE)

**Caralluma bicolor** Ramch., S. Joseph, H. A. Johh & C. Sofiya, Nordic. J. Bot. 29(4): 447. 2011, (APOCYNACEAE)

**Carex sanjappae** M. Bhaumik & M. K. Pathak, Taiwania 56(4): 309. 2011. (CYPERACEAE)

**Codonopsis vadsea** S.S.Dash & A.A.Mao, Nelumbo 53: 17. 2011. (CAMPANULACEAE)

**Corydalis amarnathiana** Dar, Semi & Naqshi, Taiwania 56(4): 305. 2011. (FUMARIACEAE)

**Crawfordia arunachalensis** S. S. Dash, R. Gogoi & A. A. Mao, J. Jap. Bot. 86: 127.2011. (GENTIANACEAE)

**Curculigo maharashtrensis** M.R.Almeida & S.Yadav, Fl. Maharashtra 5B: 401. 2009. (ZINGIBERACEAE)

**Curculigo savantwadiensis** M. R. Almeida & S.Yadav, Fl. Maharashtra 5B: 402. 2009. (ZINGIBERACEAE)

**Eleocharis zatei** W. Khan & Lakshmin., Bioinfolet 8(1): 5.2011. (CYPERACEAE)

**Eriocaulon malabaricum** Pradeep & Nampy, Edinburgh J. Bot. 68(2): 257. 2011. (ERIOCAULACEAE)

**Eriocaulon pykarensense** Nampy & Manudev, Edinburgh J. Bot. 68(2): 260. 2011. (ERIOCAULACEAE)

**Fimbristylis bhuskutii** W. Khan & R.D. Taur, Bioinfolet 8(1): 224. 2011. (CYPERACEAE)

**Fimbristylis nairii** W. Khan & Rakhonde, Bioinfolet 8(1): 225. 2011. (CYPERACEAE)

**Fimbristylis poklii** W. Khan, Bhuskute & Kahalkar, Bioinfolet 8(1): 3. 2011. (CYPERACEAE)

**Fimbristylis sivarajanii** W. Khan & R.D. Taur, Bioinfolet 8(1): 226. 2011. (CYPERACEAE)

**Glyphochloa maharashtraensis** Potdar & S.R. Yadav, Kew Bull. 66: 1. 2011. (POACEAE)

**Hedychium nagamiense** Sanoj, M. Sabu & V.P. Thomas, Bangladesh J. Plant Taxon. 18(2): 172. 2011. (ZINGIBERACEAE)

**Impatiens veerapazhasii** Ratheesh, Sujanapal & Meera, J. Bot. Res. Inst. Texas 5(1): 154. 2011. (BALSAMINACEAE)

**Impatiens vivekananthanii** J.R.N. Dessai & Janarth., Rheedia 21(1): 58. 2011. (BALSAMINACEAE)

**Ischaemum sayajiraoi** Raole & R. J. Desai, Kew Bull. 66: 303. 2011. (POACEAE)

**Lactuca erostrata** Roohi Bano & Qaiser, Pakistan J. Bot. 43(5): 2261. 2011. (ASTERACEAE)  
**Lasianthus chowdheryi** Karthig., Jayanthi & Sumathi, Nordic J. Bot. 29(4): 451. 2011.  
(RUBIACEAE)  
**Litsea kakkachensis** R. Ganesan, Rheedeia 21(2): 143. 2011. (LAURACEAE)  
**Murdannia brownii** Nandikar & Gurav, Taiwania 56 (3): 227. 2011. (COMMELINACEAE)  
**Murdannia satheeshiana** Joby, Nisha & Unni, Phytotaxa 22: 41. 2011. (COMMELINACEAE)  
**Paraquilegia gangotriana** Pusalkar & D.K. Singh, Nelumbo 53: 221. 2011. (RANUNCULACEAE)  
**Scleria indica** D.M. Varma & Veena Chandra, Indian J. Forest 34 (4): 503. 2011. (CYPERACEAE)  
**Scolopia parkinsonii** N. Balach., Gastmans & Chakrab. Kew Bulletin 66(4): 619. 2011.  
(FLACOURTIACEAE)  
**Zingiber diwakarianum** R. Kr. Singh, Indian J. Forest. 34(2): 245. 2011. (ZINGIBERACEAE)

### **NEW SUBSPECIES/VARIETIES/FORMA**

**Amorphophallus commutatus** (Schott) Engl. var. **anshiensis** Puneekar, Lakshmin. & Sivad., Fl. Anshi N.P., Western Ghats-Karnataka 514. 2011. (ARACEAE)  
**Calystegia hederacea** Wall. var. **longipedicellata** Bhellum & Mangotra, J. Non-Timber Forest Prod. 18(2): 169. 2011. (CONVOLVULACEAE)  
**Caralluma sarkariae** Lavranos & R. Frandsen var. **longipedicellata** Aditya, Asklepios 110: 21. 2011. (APOCYNACEAE)  
**Carex speciosa** Kunth subsp. **varmae** M. Bhaumik & M.K. Pathak, Taiwania 56(4): 311. 2011. (CYPERACEAE)  
**Ceropegia attenuata** Hook. var. **mookambikae** Diwakar & R. Kr. Singh, Indian J. Forest. 34(2): 209. 2011. (ASCLEPIADACEAE)  
**Clitoria annua** J. Graham var. **emarginata** S.L. Yadav & P.B. Dhanke. J. Bombay Nat. Hist. Soc. 107(3): 268. 2010. (LEGUMINOSAE: PAPILIONOIDEAE)  
**Crotalaria assamica** Benth. var. **keralensis** Krishnaraj, N. Mohanan & V.T Antony, Rheedeia 21 (2): 153. 2011. (LEGUMINOSAE: PAPILIONOIDEAE)  
**Curcuma amada** Roxb. var. **glabra** Velay., Unnikr, Asha & Maya, J. Econ.Taxon. Bot. 33(1): 164. 2009. (ZINGIBERACEAE)  
**Curcuma longa** L. var. **vanaharidra** Velay., Pandrav., J.K. George & Varapr J. Econ. Taxon. Bot. 33(1): 173. 2009. (ZINGIBERACEAE)  
**Eleocharis atropurpurea** (Retz.) Persl. var. **vengurlaensis** R.I. Shaikh & R.D.Taur, Bioinfolet 8(1): 7. 2011. (CYPERACEAE)

**Eleocharis geniculata** (L.) Roem. & Schult. var **kundalica** W.Khan & M.Sardesai, Bioinfolet 8(1): 9. 2011. (CYPERACEAE)

**Eragrostis tremula** (Lam.) Hochst.ex Steud. **vargajanandii** Genda Singh, Bala & C.S. Purohit, Indian Forester 137(6): 791. 2011 (POACCAE)

**Eugenia terpnophylla** Thw. var. **keralensis** S.M. Shareef, E.S. Kumar & P.E. Roy, Nordic J. Bot. 29 (4): 455. 2011. (MYRTACEAE)

**Fimbristylis nairii** W. Khan & Rakhonde forma **chaulensis** R.I.Shaikh, Bioinfolet 8(1): 226. 2011. (CYPERACEAE)

**Glyphochloa maharashtraensis** Potdar & S.R. Yadav var **hirsuta** Potdar & S.R. Yadav, Kew Bull. 66(4): 4. 2011. (POACEAE)

**Hedychium forrestii** Diels var. **palaniense** Sanoj & M.Sabu, J. Bot. Res. Inst. Texas 4(2): 634. 2010. (ZINGIBERACEAE)

**Scolopia kermodei** C. E. C. Fisch. var. **minor** N. Balach., Gastmans & Chakrab. Kew Bulletin 66 (4): 620. 2011. (FIACOURTIACEAE)

**Tripogon wightii** Hook.f. var. **kanyakumariensis** Kabeer & V.J. Nair Fl.Tamil Nadu: Grasses 183. 2009. (POACEAE)

## NEW DISTRIBUTIONAL RECORDS

### GENUS

**Berneuxia** Decne. (DIAPENSIACEAE) published by S.S. Dash & A.A. Mao in Nelumbo 53: 228. 2011.

**Sisyrinchium** L. (IRIDACEAE) published by C.N. Sunil & A.K.Pradeep in Rheedea 21(2): 170. 2011.

### SPECIES

**Acrotrema uniflorum** Hook. (DILLENIACEAE) published by E.S. Santhosh Kumar. R.E. Roy, N.B. Renjith & Mathew Dan in Rheedea 21(2): 167. 2011.

**Alpinia luteocarpa** Elmer (ZINGIBERACEAE) published by C. Muruguran & M.Y. Kamble in Indian J. Forestry 34(3): 334. 2011.

**Anredera cordifolia** (Tenore) Steenis (BASELLACEAE) published by R. Kottaimuthu, R. Ganesan & R. Vijayan in Elixir Bio Diver. 40: 5517. 2011.

**Archidendron kerrii** (Gagnep.) I.C. Nielsen (LEGUMINOSAE: MIMOSOIDEAE). published by S.S.Dash & M. Sanjappa in Nelumbo 53: 14. 2011.

**Berneuxia thibetica** Decne. (DIAPENSIACEAE) published by S.S. Dash & A.A. Mao in *Nelumbo* 53: 228. 2011.

**Bulbophyllum restrepia** (Ridl.) Ridl. (ORCHIDACEAE) published by Joju P. Alappatt in *Rheedea* 21(1): 84. 2011.

**Chusua chrysea** (W.W. Sm.) Hunt (ORCHIDACEAE) published by A. Nageshwar Rao, Ona Apang, A.A. Mao & S.S. Dash in *J. Orchid. Soc. India* 24(1-2): 99. 2010.

**Cyanotis recemosa** B. Heyne ex Hassk. (COMMELINACEAE) published by Santhosh Namphy & Joby Paul in *Rheedea* 21(1): 8. 2011.

**Gaultheria heteromera** R. C. Fang (ERICACEAE) published by S.S. Dash & A.A. Mao in *Nelumbo* 53: 230. 2011.

**Globba wardii** (B. L. Burtt & R. M. Sm.) K.J. Williams (ZINGIBERACEAE) published by S.K. Singh and Ramesh Kumar in *Taiwania* 56(3): 261. 2011.

**Hybanthus stellarioides** (Domin) P.I. Forst. (VIOLACEAE) published by M. Venkat Ramana, P.V. Prasanna and P. Venu in *Rheedea* 21(1): 10. 2011.

**Kaempferia parviflora** Wall. ex Baker (ZINGIBERACEAE) published by A.A. Mao, M. Bhaumik & N. Lokho in *Indian Forester* 137(11): 1353. 2011.

**Liparis atrosanguinea** Ridl. (ORCHIDACEAE) published by R. Sumathi, J. Jayanthi & K. Karthigeyan in *Taiwania* 56(3): 257. 2011.

**Memecylon macrocarpum** Thwaites. (MELASTOMATACEAE) published C. Muruguran & G.V.S Murthy in *J. Econ. Taxon. Bot.* 34(3): 522. 2010

**Memecylon minutiflorum** Miq. (MELASTOMATACEAE) published C. Murugan in *Indian J. Forestry* 34(4): 469. 2011.

**Murdannia striatipetala** Faden (COMMELINACEAE) published by Mayur D. Nandikar, R.V. Gurav & Divya Umesh in *J. Bombay Nat. Hist. Soc.* 108(1): 67. 2011.

**Rhododendron dekatanum** Cowan (ERICACEAE) published by A.A. Mao & M. Bhaumik in *Nelumbo* 53: 217. 2011.

**Rhododendron pudorosum** Cowan (ERICACEAE) published by A.A. Mao & M. Bhaumik in *Nelumbo* 53: 218. 2011.

**Sisyrinchium rosulatum** E.P. Bicknell. (IRIDACEAE) published by C.N. Sunil & A. K. Pradeep in *Rheedea* 21(2): 170. 2011.

**Stachyphrynium repens** (Korn.) Suksathan & Borchs. (MARANTACEAE) published by T. Rajesh Kumar, M. Sabu and V.P. Thomas in *Rheedea* 21(2): 139. 2011.

**Thottea celebica** Ding Hou (ARISTOLOCHIACEAE) published by C. Murugan in *Rheedea* 21(2):

149. 2011.

### SUBSPECIES

**Carex rara** Boott subsp. **potanicola** T. Koyama (Cyperaceae) published by D. Veeranjaneeyula, M.V. Suresh Babu, M Bheemalingppa & B.Ravi Prasad Rao in J. Econ.Taxon. Bot. 35(4): 652. 2011.

**Hoepa jucunda** Thwaites subsp. **modesta** DC. (DIPTEROCARPACEAE) published by C. Muruguran & R. Gopalan in J. Econ. Taxon. Bot. 34(3): 551. 2010

**Rhododendron glischrum** Balf. f. & W. W. Sm. subsp. **rude** (Tagg & Forrest) D.F. Chamb. (ERICACEAE) published by A.A. Mao and M. Bhaumik in Nelumbo 53: 218. 2011.

**Rhododendron sanguineum** Franch. subsp. **sanguineum** var. **sanguineum** (ERICACEAE) published by S.S. Dash & A.A. Mao in Nelumbo 53: 231. 2011.

**Rhododendron thomsonii** Hook. f. subsp. **lopsangianum** (Cowan) D.F. Chamb. (ERICACEAE) published by A.A. Mao and M. Bhaumik in Nelumbo 53: 218. 2011.

**Arnebia euchroma** (Royle) I. M. Johnst. var. **grandis** (Bornm.) Kazmi (BORAGINACEAE) published by A.N. Shukla, S.K. Srivastava & Kumar Ambrish in J. Jap. Bot. 86: 245. 2011.

**Gaultheria trichophylla** var. **eciliata** Rae & D.G. Long (ERICACEAE) published by S.S. Dash & A.A. Mao in Nelumbo 53: 230. 2011.

**Leonotis nepetifolia** (L.) R. Br. var. **africana** (P. Beauv.) J.K. Morton (LAMIACEAE) published by M. Venkat Ramana, P.V. Prasanna, P. Venu & Avishek Bhattacharjee in Taiwania 56(3): 254. 2011.

**Lyonia villosa** (Hook.f. ex C.B. Clarke) Hand.-Mazz. var. **sphaerantha** (Hand.-Mazz.) Hand.-Mazz. (ERICACEAE) published by S.S. Dash & A.A. Mao in Nelumbo 53: 231. 2011.

### FERNS AND FERN-ALLIES

Ferns and Fern-allies (Pteridophytes) live in a wide variety of habitats and often succeed in places where environmental factors discourage growth of flowering plants. The Indian ferns account for about 2% of the total fern species of the world.

In the present state of our knowledge India has about 1,265 species of ferns and Fern-allies. Many more are yet to be identified and described.

The collated information presented here includes 02 new species (one each from Tamil Nadu and Kerala), 01 new subspecies from Sikkim and 01 notho- species from Jammu & Kashmir

### NEW SPECIES

**Asplenium lacinioides** Fraser-Jenk., Pangtey & Khullar, Indian Fern J. 27(1-2): 211. 2011. (ASPLENIACEAE)

**Selaginella lakkidiana** Nisha, Namphy & Joby, Nordic J. Bot 28(6): 665. 2010. (SELAGINELLACEAE)

### NEW SUBSPECIES

**Asplenium laciniatum** D.Don subsp. **fraser-jenkinsii** Reichst. ex Pangtey & Khullar, Indian Fern J. 27(1-2): 185. 2011. (ASPLENIACEAE)

### NEW NOTHO-SPECIES

**Asplenium x sobtianum** Fraser-Jenk., Pangtey & Khullar, Indian Fern J. 27(1-2): 211. 2011. (ASPLENIACEAE)

## BRYOPHYTES

Bryophytes, the amphibians of the 'Plant Kingdom', and the second largest group of green plants next only to the angiosperms constitute a fascinating component of biodiversity and are widely spread in almost all climatic conditions. They are among the very few groups of plants found in Antarctica.

The Indian bryophytes account for about 15 per cent of the total Bryophyte species of the world. In the present state of our knowledge India has about 2,479 species of bryophytes. Many more are yet to be identified and described.

The collated information presented here includes 03 new species from India (02 species from Arunachal Pradesh and 01 species from West Bengal) and 13 new distributional records

### NEW SPECIES

**Calypogeia udarii** Sudipa Das & D.K. Singh, Nelumbo 53: 194. 2011. (CALYPOGEIACEAE)

**Lopholejeunea udarii** M. Dey & D.K. Singh, Nelumbo 53: 197. 2011. (LEJEUNEACEAE)

**Rectolejeunea devendrae** Shushil K. Singh, Indian J. Forest. 34(3): 341. 2011. (LEJEUNEACEAE)

## NEW DISTRIBUTIONAL RECORDS

### SPECIES

**Cololejeunea aequabilis** (Sande Lac.) Schiffn. (LEJEUNEACEAE) published by Monalisa Dey & D.K. Singh in J. Bryol. 33(2): 163. 2011.

**Cololejeunea bhutanica** Grolle & Mizut. (LEJEUNEACEAE) published by Monalisa Dey & D.K. Singh in J. Bryol. 33(2): 164. 2011.

**Cololejeunea dozyana** (Sande Lac.) Schiffn, (LEJEUNEACEAE) been published by Monalisa Dey and D.K. Singh in J. Bryol. 33 (2): 165. 2011.

**Cololejeunea serrulata** Steph. (LEJEUNEACEAE) published by Monalisa Dey and D.K. Singh in J. Bryol. 33(2): 165. 2011.

**Daltonia angustifolia** Dozy & Molk. (DALTONIACEAE) published by A.E.D. Daniels, K.C. Kariyappa and P. Daniel in Nelumbo 53: 133. 2011.

**Daltonia contorta** Muller Hal. (DALTONIACEAE) published by A.E.D. Daniels, K.C. Kariyappa and P. Daniel in Nelumbo 53: 136. 2011.

**Erpodium dorningense** (Sprengel.) Muller Hal. (ERPODIACEAE) published by A.K. Astana, Vinay Sahu & Anita Srivastava in Nat. Acad. Sci. Lett. 34(7&8): 263. 2011.

**Grimmia funalis** (Schwagr.) Bruch & Schimp. (GRIMMIACEAE) published by C.N. Manju & K.P. Rajesh in Taiwania 56(1): 81.2011.

**Jubula pennsylvanica** (Steph.) A. Evans (JUBULACEAE) published by Monalisa Dey, Devendra Singh & D. K. Singh in Taiwania 56(1): 66. 2011.

**Lejeunea kodamae** Ikegami & Inoue (LEJEUNEACEAE) published by Geeta Asthana & Murti Saxena in J. Bryol. 33(1): 89. 2011.

**Plagiochila grossa** Grolle & M.L. So (PLAGIOCHILACEAE) published by A.E.D. Daniels & J. L. Mabel in Lindbergia 33: 80. 2010.

**Plagiochila hyalodermica** Grolle & M.L. So. (PLAGIOCHILACEAE) published by Devendra Singh & D.K. Singh in Indian J. Forest. 34(4): 465. 2011.

**Ptilidium pulcherrimum** (G. Weber) Vainio (PTILIDIACEAE) published by Devendra Singh & D.K. Singh in Nelumbo 53: 205. 2011.

### VARIETY

**Thuidium recognitum** (Hedw.) Lindb. var. **delicatulum** (Hedw.) Warnst published by Virendra Nath, Pooja Bansal & A.K. Asthana, Taiwania 56(4): 333. 2011.

## LICHENS

Lichens are symbiotic association of a fungus with a photosynthetic partner usually a green alga or cyanobacterium. Lichens are widespread, however many species are sensitive to environmental disturbances and may be useful in assessing the effect of air pollution. Lichens have also been used in making dyes and perfumes as well as in traditional medicines.

The Indian lichens account for about 17 per cent of the total species of the world.

In the present state of our knowledge India has about 2333 species of lichens. Many more are yet to be identified and described.

The collated information presented here includes new species (03 species from Arunachal Pradesh, 02 species each from Karnataka, Maharashtra and West Bengal, 01 species each from Meghalaya, Himachal Pradesh, Tamil Nadu and Uttarakhand). 01 new variety from Uttarakhand and 27 new distributional records of lichens from India

### NEW SPECIES

**Carbacanthographis albolirellata** B.O. Sharma & Khadilkar, Lichenologist 43(5): 293. 2011.  
(GRAPHIDACEAE)

**Carbacanthographis indica** B.O. Sharma & Khadilkar, Lichenologist 43(5): 295. 2011.  
(GRAPHIDACEAE)

**Graphis elevativerrucosa** Chitale, Makhija & B.O. Sharma, Mycotaxon 116: 470. 2011.  
(GRAPHIDACEAE)

**Graphis maharashtrana** Chitale, Makhija & B.O. Sharma, Mycotaxon 115: 472. 2011.  
(GRAPHIDIACEAE)

**Graphis parvicarpa** B.O. Sharma & Khadilkar, Lichenologist 43(5): 487. 2011. (GRAPHIDACEAE)

**Graphidastra himalayana** Jagadeesh Ram & G.P. Sinha, Geophytology 39(1-2): 83. 2011.  
(ROCELLACEAE)

**Hemithecium isidiatum** Upreti & U. Dubey, Lichenologist 43(5): 483. 2011. (GRAPHIDACEAE)

**Herpothallon sticticum** Jagadeesh & G.P.Sinha in Mycotaxon 116: 314. 2011 (ARTHONIACEAE)

**Pallidogramme bengalense** B.O. Sharma & Pradnya Khadilkar, Lichenologist 43(5): 489. 2011.  
(GRAPHIDACEAE)

**Phyllopsora catervisorediata** G.K. Mishra, Upreti & Nayaka, Mycotaxon 115: 33. 2011  
(RAMALINACEAE)

**Phyllopsora himalayensis** G.K. Mishra, Upreti & Nayaka, Mycotaxon 115: 38. 2011  
(RAMALINACEAE)

**Schistophoron indicum** Kr. P.Singh & Swarnalatha, Lichenologist 43(3): 209. 2011.  
(GRAPHIDIACEAE)

**Syncesia indica** S. Joshi & Upreti. The Bryologist, 114: 215. 2011. (ROCELLACEAE)

### NEW VARIETY

**Phyllopsora coralline** var. **subglaucella** G.K. Mishra, Upreti & Nayaka, Mycotaxon 115: 36.  
2011. (RAMALINACEAE)

### NEW DISTRIBUTIONAL RECORDS

#### SPECIES

**Amparoina spinosissima** (Singer) Singer. (TRICHOLOMATACEAE) published by Dollymol M.  
Aravindakshan & P. Manimohan in Mycotaxon 114: 50. 2010.

**Caloplaca chalybaea** (Fr.) Mull. Arg. (TELOSCHISTACEAE) published by Yogesh Joshi & Dalip K.  
Upreti, Mycotaxon 117: 54. 2011.

**Caloplaca litoricola** Brodo. (TELOSCHISTACEAE) published by Yogesh Joshi & Dalip K. Upreti,  
Mycotaxon 117: 55. 2011.

**Caloplaca lypera** Poelt & Hinter. (TELOSCHISTACEAE) published by Yogesh Joshi & Dalip K.  
Upreti, Mycotaxon 117: 57. 2011

**Caloplaca maura** Poelt & Hinter. (TELOSCHISTACEAE) published by Yogesh Joshi & Dalip K.  
Upreti, Mycotaxon 117: 58. 2011

**Graphis creba** Vain (GRAPHIDIACEAE) published by K.P. Singh & G. Swarnalatha, Indian J.  
Forest. 34(3): 355. 2011

**Graphis cycasicola** A. W. Archer & Elix (GRAPHIDIACEAE) published by K.P. Singh, G.  
Swarnalatha & S.B. Singh, Indian J. Forest. 34(2): 243. 2011.

**Graphis daintreensis** (A. W. Archer) A. W. Archer (GRAPHIDIACEAE) published by K.P. Singh &  
G. Swarnalatha, Indian J. Forest. 34 (3): 355. 2011.

**Graphis dimidiata** Vain (GRAPHIDIACEAE) published by K.P. Singh & G. Swarnalatha, Indian J.  
Forest. 34(3): 355. 2011.

**Graphis farinulenta** Mull. Arg. (GRAPHIDIACEAE) published by K.P. Singh, G. Swarnalatha & S.B.  
Singh, Indian J. Forest. 34(2): 243. 2011.

**Graphis galactoderma** (Zahlbr.) Lucking (GRAPHIDIACEAE) published by Gayatri Chitale, Urmila  
Makhija & Bharati Sharma, Mycotaxon 115: 471. 2011.

**Graphis japonica** (Mull. Arg.) A.W. Archer & Lucking (GRAPHIDIACEAE) published by K.P. Singh,

G. Swarnalatha & S.B.Singh, Indian J. Forest. 34(2): 243. 2011.

**Graphis kousyuensis** (Horik. & M. Nakan.) Lucking (GRAPHIDIACEAE) published by K.P. Singh, G. Swarnalatha & S.B. Singh, Indian J. Forest. 34(2): 244. 2011.

**Graphis parilis** Kremph. (GRAPHIDIACEAE) published by Gayatri Chitale, Urmila Makhija & Bharati Sharma, Mycotaxon 115: 475. 2011.

**Herpothallon echinatum** Aptroot, Lucking & Will-Wolf (ARTHONIAEAE) published by Jagadeesh Ram & G.P.Sinha, Mycotaxon 116: 316. 2011

**Opegrapha discolour** Vain (ROCELLACEAE) published by Siljo Joseph & G.P.Sinha, Geophytology 40(1-2): 82. 2011

**Opegrapha simplicior** (Nyl.) Nyl. (ROCELLACEAE) published by Siljo Joseph & G.P.Sinha, Geophytology 40(1-2): 84. 2011

**Phyllopsora albicans** Mull. Arg. (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 31. 2011.

**Phyllopsora breviscula** (Nyl.) Mull. Arg. (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 32. 2011.

**Phyllopsora chlorophaea** (Mull. Arg.) Zahlbr. (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 33. 2011.

**Phyllopsora confusa** Swinscow & Krog. (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 34. 2011

**Phyllopsora furfuracea** (Pers.) Zahlbr., in Engler & Prantl (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 37. 2011.

**Phyllopsora isidiotyla** (Vain.) Riddle (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 39. 2011.

**Phyllopsora kalbii** Brako. (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 40. 2011.

**Phyllopsora mauritiana** (Taylor) Gotth. Schneid. (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon, 115: 41. 2011

**Phyllopsora nemoralis** Timdal & Kro (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 42. 2011

**Phyllopsora subcrustacea** (Malme) Brako, (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 42. 2011

**Phyllopsora swinscowii** Timdal & Krog (RAMALINACEAE) published by Gaurav K. Mishra, Dalip K. Upreti, Sanjeeva Nayaka & Biju Haridas, Mycotaxon 115: 43. 2011

## FUNGI

Fungi distributed worldwide, perform an essential role in nature by decomposing organic matter and are indispensable in nutrient cycling. They have long been used as source of food and in fermentation of various food products and now they are an important source of antibiotics.

The Indian fungi account for about 20 per cent of the total species of the world. (In the present state of our knowledge India has about 14,698 species of fungi. Many more are yet to be identified and described.

The collated information presented here includes 02 new genera (one each from Arunachal Pradesh and Madhya Pradesh). 70 new species from India (38 species from Kerala, 07 species from Madhya Pradesh and Karnataka, 04 species each from Tamil Nadu and Sikkim, 04 species from Maharashtra, 02 species each from Goa and Uttar Pradesh, 01 species each from Arunachal Pradesh and Uttarakhand). 05 new infra specific taxa (02 each from Kerala and Tamil Nadu and 01 from Maharashtra) and 01 genus and 10 species as new distributional record for India.

### NEW GENUS

**Beltramono** Dubey, Pandey & Monoharachary, J. Mycopathol. Res. 49(2): 321. 2011. (DEMATIACEAE)

**Dendrophlebia** Dhingra & Priyanka, Mycotaxon 116: 157. 2011. (CORTICIACEAE)

### NEW SPECIES

**Amozonia palaquii** Hosag. & P.J. Robin, Bioscience Discovery 2(2): 264. 2011. (MELIOLACEAE)

**Anaselenosporella indica** Pratibha, Bhat & Raghuk, Mycotaxon 117: 269. 2011.

**Appendiculella elaeocarpicola** Hosag. & P.J. Robin, J. Threatened Taxa 3(5): 1782. 2011. (MELIOLACEAE)

**Arachnophora goanensis** Pratibha, Bhat & Raghuk, Mycotaxon 117: 272. 2011.

**Asteridiella anacolosae** Hosag., A. Sabeena & Jacob Thomas, Bioscience Discovery 2(1): 117. 2011. (MELIOLACEAE)

**Asteridiella symploci-microphyllae** Hosag. & A. Sabeena, Bioscience Discovery 2(1): 118. 2011. (MELIOLACEAE)

**Asteridiella toddaliae** Hosag. & M.C. Riju, J. Threatened Taxa 3(3): 1615. 2011. (MELIOLACEAE)

**Asterina homonoiae** Hosag. & A. Sabeena, Bull. Basic & Applied Pl. Bio. 1(1): 49. 2011. (ASTERINACEAE)

**Asterina hugoniae** Hosag., A. Sabeena & M.C. Riju, J. Threatened Taxa 3(6): 1880. 2011. (ASTERINACEAE)

**Asterina kukkalensis** Hosag., V Dhivaharan & M.C. Riju, J. Sci. Trans. Environ. Techno. 4(4): 164. 2011. (ASTERINACEAE)

**Asterina leucadis** Hosag. & P.J. Robin, Bioscience Discovery 2(2): 264. 2011. (ASTERINACEAE)

**Asterina michelifolia** Hosag. & M.C. Riju, J. Threatened Taxa 3(7): 1942. 2011. (ASTERINACEAE)

**Asterina micheligena** Hosag. & M.C. Riju, J. Threatened Taxa 3(7): 1944. 2011. (ASTERINACEAE)

**Asterina myristicacearum** Hosag. & A. Sabeena, J. Threatened Taxa 3(3): 2144. 2011. (ASTERINACEAE)

**Asterina myristicae** Hosag. & A. Sabeena, J. Threatened Taxa 3(10): 2144. 2011. (ASTERINACEAE)

**Asterostomula syzygii** Hosag., A. Sabeena & Jacob-Thomas, Plant Pathology & Quarantine 1(1): 7. 2011.

**Beltramono costei** Dubey, Pandey & Monoharachary, J. Mycopathol. Res. 49(2): 323. 2011. (DEMATIACEAE)

**Biospora aeglei** Dubey & Pandey, J. Mycopathol. Res. 49(2): 357. 2011.

**Cercosporidium ziziphus** Dubey & Pandey, J. Mycol. Plant Pathol. 41(2): 337. 2011 (MYCOSPHAERELLACEAE)

**Curvularia ocimi** Dubey & Pandey, J. Mycol. Plant Pathol. 41(2): 335. 2011. (PLEOSPORACEAE)

**Dendrophlebia crassispora** Dhingra & Priyanka, Mycotaxon 116: 159. 2011. (CORTICIACEAE)

**Entoloma vittalii** Senthil, Kumaresan & S.K. Singh, Mycotaxon 114: 62. 2010. (ENTOLOMATACEAE)

**Irenopsis loranthicola** Hosag. & M.C. Riju, Plant Pathology & Quarantine 1(2): 122. 2011.

**Hericium bharengense** K. Das, Stalpers & Eberhardt, Cryptog. Mycol. 32(3): 285. 2011. (HERICIACEAE)

**Irenopsis pterigotae** Hosag., A. Sabeena & Jacob Thomas, Bioscience Discovery 2(1): 119. 2011.

**Lactarius byssaceus** K. Das & Verbeken, Cryptog. Mycol. 32(4): 376. 2011. (RUSSULACEAE)

**Lactarius elaioviscidus** K. Das & Verbeken, Cryptog. Mycol. 32(4): 367. 2011. (RUSSULACEAE)

**Lactarius ermineus** K. Das & Verbeken, Cryptog. Mycol. 32(4): 371. 2011. (RUSSULACEAE)

**Meliola abdukkalamii** Hosag. & M.C. Riju, Plant Pathology & Quarantine 1(2): 123. 2011.

(MELIOLACEAE)

**Meliola abri** Hosag. & M.C.Riju, Plant Pathology & Quarantine 1(2): 124. 2011. (MELIOLACEAE)

**Meliola aporusae** Hosag. & P.J. Robin, Bioscience Discovery 2(2): 265. 2011. (MELIOLACEAE)

**Meliola ardisiigena** Hosag., A. Sabeena & P.J. Robin, Bioscience Discovery 2(1): 120. 2011.

(MELIOLACEAE)

**Meliola canavaliae** Hosag. & M.C. Riju, Plant Pathology & Quarantine 1(2): 125. 2011.

(MELIOLACEAE)

**Meliola clausenigena** Hosag. & M.C. Riju, J. Threatened Taxa 3(3): 1617. 2011. (MELIOLACEAE)

**Meliola cyperacearum** Hosag., V Dhivaharan & M.C. Riju, J. Sci. Trans. Environ. Techno. 4(4): 165.

2011. (MELIOLACEAE)

**Meliola diospyri-buxifoliae** Hosag., A. Sabeena & M.C. Riju, Bioscience Discovery 2(1): 120.

2011. (MELIOLACEAE)

**Meliola dysoxyligena** Hosag. & M.C.Riju, Plant Pathology & Quarantine 1(2): 126. 2011.

(MELIOLACEAE)

**Meliola goauniicola** Hosag. & P.J. Robin, Bioscience Discovery 2(2): 264. 2011. (MELIOLACEAE)

**Meliola homonoiae** Hosag. & A. Sabeena, Bull. Basic & Applied Pl. Bio. 1(1): 51. 2011.

(MELIOLACEAE)

**Meliola hoveniae** Hosag., V Dhivaharan & M.C. Riju, J. Sci. Trans. Environ. Techno. 4(4): 166.

2011. (MELIOLACEAE)

**Meliola kannurensis** Hosag, G.R. Archana, K.M. Khaleel & M. Soumya, Bioscience Discovery 2(3):

348. 2011. (MELIOLACEAE)

**Meliola knemae** Hosag. & P.J. Robin, Bioscience Discovery 2(2): 264. 2011. (MELIOLACEAE)

**Meliola lophopetaligena** Hosag. & P.J. Robin, J. Threatened Taxa 3(5): 1785. 2011.

(MELIOLACEAE)

**Meliola luculiae** Hosag., V Dhivaharan & M.C. Riju, J. Sci. Trans. Environ. Techno. 4(4): 167.

2011. (MELIOLACEAE)

**Meliola premnigena** Hosag. & M.C.Riju, Plant Pathology & Quarantine 1(2): 127. 2011.

(MELIOLACEAE)

**Meliola sterculicola** Hosag. & P.J. Robin, J. Threatened Taxa 3(5): 1782. 2011. (MELIOLACEAE)

**Meliola strombosiigena** Hosag. & M.C.Riju, J. Threatened Taxa 3(3): 1618. 2011.

(MELIOLACEAE)

**Merismella indiae** Dubey & Pandey, J. Mycopath. Res. 48(2): 397. 2011. (CHAETOTHYRIACEAE)

**Mycena saloma** Aravind. & Manim., Mycotaxon 117: 240. 2011. (MYCENACEAE)

**Passalora barringtoniigena** R. Singh, Sham. Kumar & Kamal, Mycotaxon 117: 138. 2011.  
(MYCOSPHAERELLACEAE)

**Phakopsora blepharidis** A.R. Patil, T.R Kawale & M. S. Patil, Bioinfolet 8(1): 11. 2011.  
(PHAKOPSORACEAE)

**Phlebiopsis mussooriensis** Priyanka, Dhingra & N. Kaur, Mycotaxon 115: 255. 2011.  
(PHANEROCHAETACEAE)

**Pilidiella crousii** Rajeshkumar, S.K. Singh & Hepat, Mycotaxon 115: 158. 2011.  
(SCHIZOPARMACEAE)

**Pseudocercospora kamalii** Rajeshkumar, Rahul Sharma & S.K. Singh, Mycotaxon 116: 232.  
2011. (MYCOSPHAERELLACEAE)

**Pseudocercospora miliusae** R. Singh, Sham. Kumar & Kamal, Mycotaxon 117: 140. 2011.  
(MYCOSPHAERELLACEAE)

**Questieriella ophiorrhizae** Hosag., C.J. Thimmaiah & M. Jayashankara, J. Threatened Taxa  
3(12): 2268. 2011. (SCHIFFNERULACEAE)

**Sarcinella caralliae** Hosag., C.J. Thimmaiah & M. Jayashankara, J. Threatened Taxa 3(12):  
2269. 2011. (SCHIFFNERULACEAE)

**Sarcinella loranthacearum** Hosag., J. Thomas & D. K. Agarwal, J. Yeast & Fungal Res. 2(5): 85.  
2011. (SCHIFFNERULACEAE)

**Sarcinella tamarindi** Hosag. & M.C. Riju, Mycosphere 2(2): 158. 2011. (SCHIFFNERULACEAE)

**Schiffnerula aristolochiae** Hosag., C.J. Thimmaiah & M. Jayashankara, J. Threatened Taxa 3(12):  
2269. 2011. (SCHIFFNERULACEAE)

**Schiffnerula azadirachtae** Hosag. & A. Sabeena, J. Threatened Taxa 3(3): 1620. 2011.  
(SCHIFFNERULACEAE)

**Schiffnerula cryptostegiae** Hosag. & Jacob-Thomas, Plant Pathology & Quarantine 1(2): 178.  
2011. (SCHIFFNERULACEAE)

**Schiffnerula flacourtiiae** Hosag. & Jacob-Thomas, Plant Pathology & Quarantine 1(2):181. 2011.  
(SCHIFFNERULACEAE)

**Schiffnerula hoddurensis** Hosag., C.J. Thimmaiah & M. Jayashankara, J. Threatened Taxa 3(12):  
2270. 2011. (SCHIFFNERULACEAE)

**Schiffnerula lagerstroemiae** Hosag. & Riju, Plant Pathology & Quarantine 1(2): 188. 2011.  
(SCHIFFNERULACEAE)

**Schiffnerula meliosmatis** Hosag., J. Thomas & D. K. Agarwal, J. Yeast & Fungal Res. 2(5): 86.  
2011. (SCHIFFNERULACEAE)

**Schiffnerula palodensis** Hosag. & M.C.Riju, Bioscience Discovery 2(2): 272. 2011.  
(SCHIFFNERULACEAE)

**Scytalidium zapotii** Dubey & Pandey, Nelumbo 53: 1. 2011. (HYPHOMYCETES)

**Sporidesmium officinale** Dubey & Pandey, Nelumbo 53: 1. 2011. (HYPHOMYCETES)

### NEW SUBSPECIES/VARIETIES

**Asteridiella scolopiae** var. **indica** Hosag. & M.C. Riju, Plant Pathology & Quarantine 1(2): 121. 2011.

**Asterina solani** Me Alpine var. **kodaikanalensis** Hosag., V Dhivaharan & M.C. Riju, J. Sci. Trans. Environ. Techno. 4(4): 165. 2011.

**Meliola daviesii** Hansf. var. **kodaikanalensis** Hosag., V Dhivaharan & M.C. Riju, J. Sci. Trans. Environ. Techno. 4(4): 166. 2011. (MELIOLACEAE)

**Meliola gouaniae** Hansf. var. **keralica** Hosag. & P.J. Robin, J. Threatened Taxa 3(5): 1785. 2011. (MELIOLACEAE)

**Uredo leonotidis** P. Hennings var. **indica** A.R. Patil, T.R Kawale & M. S. Patil, Bioinfolet 8(1): 12. 2011. (PUCCINIALES)

### NEW DISTRIBUTIONAL RECORDS

#### GENUS

**Merismella** Syd. (CHAETOTHYRIACEAE) published by Rashmi Dubey & A.K. Pandey in J. Mycopathol. Res. 48(2): 397. 2011.

#### SPECIES

**Asterostomula loranthi** Theiss. (MELIOLACEAE) published by V.B. Hosagoudar, Sabeena, A. & Jacob-Thomas, Plant Pathology & Quarantine 1(1): 7. 2011.

**Catenosynnema micheliae** Kodsueb et al. published by J. Pratibha, D.J. Bhat & S. Raghukumar, Mycotaxon 117: 276. 2011.

**Cheiromycesopsis echinulata** Mercado & J. Mena published by J. Pratibha, D.J. Bhat & S. Raghukumar, Mycotaxon 117: 276. 2011.

**Flabellospora amphibia** (Price & Talbot) Descals (PEZIZOMYCOTINA) published by C.M. Pawara, S.Y. Patil and B.D. Borse, Bioinfolet 8(1): 18. 2011.

**Gliocephalotrichum simplex** (J.A. Mey.) B.J. Wiley & E.G. Simmons. (NECTRIACEAE) published by

Sanjay K. Singh, Lai Sahab Yadav, Paras N. Singh, Rahul Sharma & Kunhiraman C. Rajeshkumar, Mycotaxon 114(4): 163-169. 2010.

**Meliola garugae** Stev. & Rold., (MELIOLACEAE) published by V.B. Hosagoudar & P.J. Robin, J. Threatened Taxa 3(5): 1785. 2011.

**Puccinia praetermissa** J. Parm (PUCCINIACEAE) published by A.R. Patil, T.R Kawale & M. S. Patil, Bioinfolet 8(1): 12. 2011.

**Puccinia varioides** I.Jorstad (PUCCINIACEAE) published by A.R. Patil, T.R Kawale & M. S. Patil, Bioinfolet 8(1): 11. 2011.

**Russula periglypta** Berk. & Broome. (RUSSULACEAE) published by P. Manimohan & K. P. Deepna Latha, Mycotaxon 116: 126. 2011.

**Russula purpureonigra** Petch. (RUSSULACEAE) published by P. Manimohan & K. P. Deepna Latha, Mycotaxon 116: 128. 2011.

## ALGAE

Algae are large and diverse group of simple, typically autotrophic organisms from unicellular to multicellular forms. Though algae are becoming more and more open to exploitation worldwide, knowledge on algae is probably very elementary in India. The Indian algae account for about 18 per cent of the total species of the world.

In the present state of our knowledge India has about 7,192 species of algae. Many more are yet to be identified and described.

The collated information presented here includes 07 new species (05 from Karnataka and 02 from Tamil Nadu) and 01 species as new distributional records.

## NEW SPECIES

**Gomphonema gandhii** Karthick & Kociolek, Nova Hedwigia 93 (1-2): 219. f. 2-19. 2011. (BACILLARIOPHYCEAE)

**Gomphonema difformum** Karthick & Kociolek, Nova Hedwigia 93 (1-2): 223. f. 20-40. 2011. (BACILLARIOPHYCEAE)

**Gomphonema diminutum** Karthick & Kociolek, Nova Hedwigia 93 (1-2):227. f. 41-51. 2011. (BACILLARIOPHYCEAE)

**Pleurosira indica** Karthick & Kociolek, Phytotaxa 22: 27. 2011. (THALASSIOSIRACEAE)

**Spicaticribra kodaikanaliana** Karthick & Kociolek, Phytotaxa 22: 29. 2011. (THALASSIOSIRACEAE)

**Urosolenia curvata** Karthick & Kociolek, Phytotaxa 22: 32. 2011. (RHIZOSOLENIACEAE)

**Urosolenia extensa** Karthick & Kociolek, Phytotaxa 22: 34. 2011. (RHIZOSOLENIACEAE)

### NEW DISTRIBUTIONAL RECORD

**Dispora crucigenoides** Printz (VOLVOCALES) published by Debajyoti Das, Golam Mustafa and Jai Prakash Keshri in J. Econ. Taxon. Bot. 35(1): 219. 2011.

## MICROBES

Out of the estimated 50,000 -3,000,000 species of bacteria and archaea, only about 8050 species have been described globally. About 966 species have been isolated from India. It is necessary to understand the diversity of bacteria and archaea present in a great variety of Indian environments, and understand their role in nature.

In the present state of our knowledge, Indian microbes represent about 11% of the total species of the world.

The collated information presented here includes 07 new genera 31 new species of microbes from India.

### NEW GENERA

**Calidifontibacter** Arunachalam Ruckmani, Ishwinder Kaur, Peter Schumann, Hans-Peter Klenk & Shanmugam Mayilraj, Int. J. Syst. Evol. Microbiol. 61: 2419-2424. 2011. (ACTINOBACTERIA)

**Cecembia** P. Anil Kumar, T.N.R. Srinivas, S. Madhu, R. Sravan, Shashi Singh, S.W.A. Naqvi, S. Mayilraj, & S. Shivaji, Int. J. Syst. Evol. Microbiol. 61: 2011. (CYCLOBACTERIACEAE).

**Chryseomicrobium** Pankaj Kumar Arora, Archana Chauhan, Bhawana Pant, Suresh Korpole, Shanmugam Mayilraj & Rakesh Kumar Jain, Int. J. Syst. Evol. Microbiol. 61: 1859-1864. 2011. (PLANOCOCACEAE).

**Imtechella** Vikram Surendra, Bhawana Pant, Suresh Korpole, T. N. R Srinivas & Pinnaka Anil Kumar, Int. J. Syst. Evol. Microbiol. 61: 2011. (FLAVOBACTERIACEAE)

**Lutibaculum** Pinnaka Anil Kumar, T. N. R. Srinivas, Poorna Manasa, S. Madhu & S. Shivaji, Int. J. Syst. Evol. Microbiol. 61: 10. 2011. (PROTEOBACTERIA)

**Phaeovibrio** K. V. N. S. Lakshmi, Ch. Sasikala, G. V. Ashok Kumar, R. Chandrasekaran & Ch. V. Ramana, J. Syst. Evol. Microbiol. 61: 828-833. 2011. (RHODISPIRILLACEAE)

**Sandaracinus** Kathrin I Mohr, Ronald O Garcia, Klaus Gerth, Herbert Irschik & Rolf Muller, Int. J. Syst. Evol. Microbiol. 61: 2011. (SANDARACINACEAE)

## NEW SPECIES

**Agrococcus carbonis** Soniya Dhanjal, Ishwinder Kaur, Suresh Korpole, Peter Schumann, Swaranjit Singh Cameotra, Rudiger Pukall, Hans-Peter Klenk, & Shanmugam Mayilraj., Int. J. Syst. Evol. Microbiol. 61: 2011. (ACTINOBACTERIA)

**Actinomadura sediminis** Jie He, Ying Xu, Maloy Kumar Sahu, Xin-Peng Tian, Guo-Xing Nie, Qiong Xie, Si Zhang, Kannan Sivakumar, & Wen-Jun Li. Int. J. Syst. Evol. Microbiol. 61: 2011. (ACTINOBACTERIA)

**Blastochloris gulmargensis** V. Venkata Ramana, Shivali Kapoor, E. Shobha, E. V. V. Ramprasad, Ch. Sasikala, & Ch. V. Ramana, Int. J. Syst. Evol. Microbiol. 61: 1811-1816. 2011. (PROTEOBACTERIA)

**Brachybacterium saurashtrense** Itri Gontia, Kumari Kavita, Michael Schmid, Anton Hartmann, & Bhavanath., Int. J. Syst. Evol. Microbiol. 61: 2799-2804. 2011. (ACTINOBACTERIA).

**Caenispirillum salinarum** Ritika Chanan, Suresh Korpole, & Anil Kumar Pinnaka, Int. J. Syst. Evol. Microbiol. 61(9): 2011. (PROTEOBACTERIA)

**Calidifontibacter indicus** Arunachalam Ruckmani, Ishwinder Kaur, Peter Schumann, Hans-Peter Klenk, & Shanmugam Mayilraj. Int. J. Syst. Evol. Microbiol. 61: 2419-2424. 2011. (DERMACOCCACEAE)

**Cecembia lonarensis** P. Anil Kumar, T. N. R, Srinivas, S. Madhu, R. Sravan, Shashi Singh, S. W. A. Naqvi, S. Mayilraj, & S. Shivaji, Int. J. Syst. Evol. Microbiol. 61(11): 2011. (CYCLOBACTERIACEAE).

**Chryseomicrobium imtechense** Pankaj Kumar Arora, Archana Chauhan, Bhawana Pant, Suresh Korpole, Shanmugam Mayilraj, & Rakesh Kumar Jain Int. J. Syst. Evol. Microbiol. 61: 1859-1864. 2011. (PLANOCOCCACEAE)

**Flavobacterium ummariense** Pushp Lata, Devi Lai & Rup Lai, Int. J. Syst. Evol. Microbiol. 61: 2011. (FLAVOBACTERIACEAE)

**Fulvivirga imtechensis** Nupur, Shalley Sharma, Pradip Kumar Singh, Suresh Korpole & Anil Kumar Pinnaka., Int. J. Syst. Evol. Microbiol. 61(11): 2011. (FLAMMOVIRGACEAE)

**Georgenia satyanarayanai** A. Srinivas, K. Rahul, Ch. Sasikala, Y. Subash, E.V.V. Ramprasad & Ch.V. Ramana., Int. J. Syst. Evol. Microbiol. 61: 2011. (ACTINOBACTERIA)

**Ignatzschineria indica** Arvind Kumar Gupta, Mahesh Shantappa Dharne, Ashraf Yusuf Rangrez, Pankaj Verma, Hemant V. Ghate, Manfred Rohde, Milind Shivaji Patole & Yogesh Shreepad

Shouche, Int. J. Syst. Evol. Microbiol. 61: 1360-1369. 2011. (PROTEOBACTERIA).

**Ignatzschineria ureiclastica** Arvind Kumar Gupta, Mahesh Shantappa Dharne, Ashraf Yusuf Rangrez, Pankaj Verma, Hemant V. Ghate, Manfred Rohde, Milind Shivaji Patole & Yogesh Shreepad Shouche, Int. J. Syst. Evol. Microbiol. 61: 1360-1369. 2011 (PROTEOBACTERIA).

**Imtechella halotolerans** Vikram Surendra, Bhawana Pant, Suresh Korpole, T.N.R Srinivas & Pinnaka Anil Kumar, Int. J. Syst. Evol. Microbiol. 61: 2011. (FLAVOBACTERIACEAE)

**Lutibaculum baratangense** Pinnaka Anil Kumar, T. N. R. Srinivas, Poorna Manasa, S. Madhu & S. Shivaji, Int. J. Syst. Evol. Microbiol. 61(10): 2011. (PROTEOBACTERIA)

**Microbacterium arthrosphaerae** P. Kampf, P. D. Rekha, P. Schumann, A. B. Arun, Chiu-Chung Young, Wen-Ming Chen & K. R. Sndhar., Int. J. Syst. Evol. Microbiol. 61: 1334-1337. 2011. (ACTINOBACTERIA)

**Microbacterium amylolyticum** Shailly Anand, Kiran Bala, Anjali Saxena, Peter Schumann & Rup Lai, Int. J. Syst. Evol. Microbiol. 61(10): 2011. (ACTINOBACTERIA)

**Microbacterium immunditiarum** Srinivasan Krishnamurthi, Amit Bhattacharya, Peter Schumann, Syed G. Dastager, Shu-Kun Tang, Wen-Jun Li & Tapan Chakrabarti, Int. J. Syst. Evol. Microbiol. 61: 2011. (ACTINOBACTERIA)

**Micrococcus lactis** Chittpuma, Pradip K. Singh, Dipti Verma, Anil Kumar Pinnaka, Shanmugam Mayilraj & Suresh Korpole, Int. J. Syst. Evol. Microbiol. 61: 2832-2836. 2011. (ACTINOBACTERIA)

**Phaeospirillum oryzae** K.V.N.S. Lakshmi, Ch. Sasikala, S. Takaichi & Ch.V. Ramana, Int. J. Syst. Evol. Microbiol. 61: 1656-1661. 2011. (RHODOSPIRILLACEAE)

**Phaeovibrio sulfidiphilus** K.V.N.S. Lakshmi, Ch. Sasikala, G.V. Ashok Kumar, R. Chandrasekaran & Ch.V. Ramana, Int. J. Syst. Evol. Microbiol. 61: 828-833. 2011. (RHODOSPIRILLACEAE)

**Phaeospirillum tilakii** Shalem P. Raj, S. Kalyana Chakravarthy, E.V.V. Ramaprasad, Ch. Sasikala & Ch. V. Ramana, Int. J. Syst. Evol. Microbiol. 61: 2011. (RHODOSPIRILLACEAE)

**Pseudoxanthomonas indica** Kirti Kumari, Pooja Sharma, Kshitiz Tyagi, & Rup Lai., Int. J. Syst. Evol. Microbiol. 61: 2107-2111. 2011. (PROTEOBACTERIA)

**Rhizobium pusense** Digvijay Panday, Peter Schumann & Subrata K. Das, Int. J. Syst. Evol. Microbiol. 61: 2632-2639. 2011. (PROTEOBACTERIA)

**Rhodopseudomonas harwoodiae** Venkata Ramana, Kalyan S. Chakravarthy, Shalem P. Raj, Vinay B., Kumar, E. Shobha, E.V.V. Ramaprasad, Ch. Sasikala & Ch. V. Ramana, Int. J. Syst. Evol. Microbiol. 61: 2011. (PROTEOBACTERIA)

**Rhodopseudomonas parapalustris** Venkata Ramana, Kalyan S. Chakravarthy, Shalem P. Raj,

Vinay B., Kumar, E. Shobha, E.V.V. Ramaprasad, Ch. Sasikala & Ch. V. Ramana, Int. J. Syst. Evol. Microbiol. 61: 2011. (PROTEOBACTERIA)

**Rhodopseudomonas pseudopalustris** Venkata Ramana, Kalyan S. Chakravarthy, Shalem P. Raj, Vinay B., Kumar, E. Shobha, E. V. V. Ramaprasad, Ch. Sasikala, & Ch V. Ramana., Int. J. Syst. Evol. Microbiol. 61: 2011. (PROTEOBACTERIA)

**Salinicoccus sesuvii** P. Kampfer, A. B. Arun, H.-J. Busse, Chiu-Chung Young, W.-A. Lai, P. D. Rekha & Wen-Ming Chen., Int. J. Syst. Evol. Microbiol. 61: 2348-2352. 2011. (Firmicutes and Related Organisms)

**Sandaracinus amylolyticus** Kathrin I. Mohr, Ronald O Garcia, Klaus Gerth, Herbert Irschik & Rolf Muller, Int. J. Syst. Evol. Microbiol. 61: 2011. (SANDARACINACEAE)

**Shewanella indica** Pankaj Verma, Prashant Kumar Pandey, Arvind Kumar Gupta, Hojun Kim, Keun Sik Baik, Chi Nam Seong, Milind Shivaji Patole & Yogesh Shreepad Shouche, Int. J. Syst. Evol. Microbiol. 61: 2058-2064. 2011. (PROTEOBACTERIA)

**Streptomyces sundarbansensis** Meyyappan Arumugam, Anindita Mitra, Arnab Pramanik, Malay Saha, Ratan Gachhui & Joydeep Mukherjee, Int. J. Syst. Evol. Microbiol. 61: 2664-2669. 2011. (ACTINOBACTERIA).