

During the year 2010, the plants discovered from India by the taxonomists of BSI and other organizations

NEW TO SCIENCE FROM INDIA

- 10 genera
- 128 species
- 3 subspecies
- 7 varieties
- 1 forma

NEW RECORDS FOR INDIA

- 2 genera
- 65 species and
- 3 subspecies
- 5 varieties

During the year 2010, the scientists of BSI published 1 new genus, 23 new species, and 5 new varieties of plants and discovered 2 genera, 60 species, 2 subspecies 5 varieties as new records for India, while the taxonomists from academia and other organizations published 9 new genera, 105 new species, 3 subspecies, 2 varieties and 1 forma of new plants and 5 species and 1 subspecies as new records for India.

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 17,724 species of angiosperms and 7 species of gymnosperms. Many more are yet to be identified and described.

The collated information presented here includes 02 new genera from North East India 58 new species (09 from Andaman & Nicobar Islands, 08 from Tamil Nadu, 07 from Uttarakhand, 05 from Kerala, from Arunachal Pradesh, 04 from Jammu & Kashmir, 03 from Maharashtra, 03 from Karnataka, 03 from Manipur, 01 each from Assam, Chattisgarh, Goa, Jharkhand, Nagaland, Orissa, species from Himachal Pradesh, 01 species from unknown locality in the country), 09 infra specific taxa (02 new subspecies, 06 new varieties, 01 new forma) and 23 new distributional

records from India.

New Genus

Larsenianthus W.J. Kress & Mood, *Phyto Keys* 1: 21. 2010. (ZINGIBERACEAE)

Stapletonia P. Singh, S.S. Dash & P. Kumari, *Nelumbo* 51: 241. 2009. (POACEAE)

New Species

Amomum andamanicum V.P. Thomas, Dan & M. Sabu, *Blumea* 55(3): 295. 2010.

(ZINGIBERACEAE)

Arnebia nandadeviensis K. Chandra Sekar, R.S. Rawal, Sanjay Gairola & Balwant

Rawat, *J. Am. Sc.* 5(2): 105. 2009 (BORAGINACEAE)

Bambusa dampaeana H.B.Naithani, Garbyal & N.S. Bisht, *Indian Forester* 136(7):

991. 2010. (POACEAE)

Bambusa manipureana H.B. Naithani & N.S. Bisht, *Indian Forester* 136(2): 262. 2010.

(POACEAE)

Boehmeria listeri Firss & Wilmot-Dear, *Edinburgh J. Bot.* 67(3): 432. 2010. (URTICACEAE)

Boehmeria manipurensis Firss & Wilmot-Dear, *Edinburgh J. Bot.* 67(3): 438. 2010.

(URTICACEAE)

Carex hokarsarensis E.U. Haq & Dar, *Rheedea* 20 (1): 29. 2010. (CYPEBACEAE)

Cephalostachyum longwanum H.B. Naithani, *Indian Forester* 136(3): 406. 2010. (POACEAE)

Ceropegia bhatii S.R Yadav & Shendage, *Kew Bull.* 65(1): 106. 2010. (ASCLEPIADACEAE)

Chlorophytum gothanense Malpure, & S.R. Yadav, *Kew Bull.* 64(4): 739. 2010.

(ANTHERICACEAE)

Cleistanthus andamanicus N. Balach., Gastmans & Chakrab., *Rheedea* 20 (1): 32. 2010.

(EUPHORBIACEAE)

Codonacanthus sanjappae Karthig., Sumathi, Jayanthi & D. Naras., *Nordic J. Bot.* 28(4): 501.

2010. (ACANTHACEAE)

Coelogyne pendula Summerh. ex D.A. Clayton & J.J.Wood, *Orchid Rev.* 118(1292): 229. 2010.

(ORCHIDACEAE)

Cryptocoryne tambraparaniana T.J.S. Rajakumar, P. Daniel, R. Selvakumari, S. Murugesan & N.

Chellaperuma, *Indian J. Forest* 33(4): 643. 2010. (ARACEAE)

Dendrocalamus manipureanus H.B. Naithani & N.S. Bisht, *Indian Forester* 136(2): 262. 2010.

(POACEAE)

Dipcadi goaense Prabhug., U.S. Yadav & Janarth., Kew Bull. 64(4): 743. 2010.
(HYACINTHACEAE)

Ephedra kardangensis P. Sharma & P. L. Uniyal, Syst. Bot. 35: 730. 2010. (EPHEDRACEAE)

Ephedra khurikensis P. Sharma & P. L. Uniyal, Syst. Bot. 35: 731. 2010. (EPHEDRACEAE)

Epigeneium arunachalense Nageswara Rao, Bull. Arunachal Forest Res. 25 (1&2): 3-5. 2009.
(ORCHIDACEAE)

Eriocaulon belgaumensis Shimpale & S.R. Yadav, Kew Bull. 65(2): 337. 2010.
(ERIOCAULACEAE)

Eriocaulon wayanadense Vivek, Swapna & K.K. Suresh, Rheede 20 (1): 25. 2010.
(ERIOCAULACEAE)

Fimbristylis matthewii M. Murugesan, V. Balasubramaniam & N. Nagarajan. J. Threatened Taxa 2(13): 1379. 2010. (CYPERACEAE)

Fimbristylis velliangiriensis M. Murugesan, V. Balasubramaniam & N. Nagarajan, J. Threatened Taxa 2(13): 1380. 2010. (CYPERACEAE)

Gigantochloa bastareana H.B. Naithani & R. C. Pal, Indian Forester 136(9): 1276. 2010.
(POACEAE)

Gymnema kollimalayanum A. Ramach. & M.B. Viswan., Adansonia, ser. 3, 31 (2): 408. 2009.
(ASCLEPIADACEAE)

Helictotrichon uniyalii Kandwal & B.K. Gupta, Nordic J. Bot. 28(1): 47. 2010. (POACEAE)

Heteropanax dhruvii R.C. Srivastava, Bull. Arunachal Forest Res. 25 (1&2): 6. 2009.
(ARALIACEAE)

Impatiens badrinathii Pusalkar & D.K. Singh, Taiwania 55(1): 13. 2010. (BALSAMINACEAE)

Impatiens devendrae Pusalkar, Taiwania 55(1): 18. 2010. (BALSAMINACEAE)

Impatiens leggei Pusalkar & D.K. Singh, Taiwania 55(1): 16. 2010. (BALSAMINACEAE)

Jansenella neglecta S.R Yadav, Chivalkar & Gosavi, Rheede 20(1): 39. 2010. (POACEAE)

Larsenianthus arunachalensis M. Sabu, Sanoj & Rajesh Kumar, Phyto Keys 1: 28. 2010.
(ZINGIBERACEAE)

Larsenianthus assamensis S. Dey, Mood & S.Choudhury, Phyto Keys 1: 26. 2010.
(ZINGIBERACEAE)

Lindera andamanica Chakrab., G.S. Lakra & P.G. Diwakar in Ramakrishna & al (eds.), Recent Trends Biodiversity Andaman & Nicobar Is., 187. 2010. (LAURACEAE)

Liparis udaii S. Mishra, J. Orchid Soc. India 23(1-2): 87. 2009. (ORCHIDACEAE)

Luisia balakrishnanii S. Misra, Nelumbo 52: 152. 2010. (ORCHIDACEAE)

Medinilla balakrishnanii Jayanti, Karthigeyan, Sumathi & Diwarkar, Nelumbo 51: 1. 2009.
(MELASTOMATACEAE)

Miliusa caudata N. Balach. & Chakrab., J. Econ. Taxon. Bot. 34(4): 801. 2010. (ANNONACEAE)

Miliusa wayanadica Sujanapal, Ratheesh & Sasidharan, J. Bot. Res. Inst. Texas 4(1): 64. 2010.
(ANNONACEAE)

Oberonia swaminathanii Ratheesh, Manudev & Sujanapal, Nordic J. Bot. 28(6): 713. 2010
(ORCHIDACEAE)

Orophea narasimhanii Karthig., Sumathi & Jayanthi, Nordic J. Bot. 28(1): 56. 2010.
(ANNONACEAE)

Papaver kachroianum Tabinda, Dar & Naqshi, Pak. J. Bot. (Special Issue): 42: 58. 2010.
(PAPAVERACEAE)

Papaver pamporicum Tabinda, Dar & Naqshi, Pak. J. Bot. (Special Issue): 42: 58. 2010.
(PAPAVERACEAE)

Pecteilis rawatii Kumar & Veldkamp, Gard. Bull. Singapore 61(2): 336. 2010. (ORCHIDACEAE)

Peristylus balakrishnanii Karthig., Sumathi & Jayanthi, Kew Bull. 65(3): 491. 2010.
(ORCHIDACEAE)

Peristylus sahanii Kumar, G.S. Rawat & Jalal, Kew Bull. 65(1): 101. 2010. (ORCHIDACEAE)

Phragmites bhattacharyae Kandwal, Uniyal & Rajesw., J. Jap. Bot. 85(3): 153. 2010.
(POACEAE)

Pogostemon raghavendranii R. Murugan & Livingst., Rheede 20 (1): 21. 2010. (LAMIACEAE)

Polystachya seidenfadeniana Mytnik & Baranow, Pl. Syst. Evol. 290(1-4): 59. 2010.
(ORCHIDACEAE)

Rotala belgaumensis S.R.Yadav, Malpure & Chandore, Nordic J. Bot 28(4): 499. 2010.
(LYTHRACEAE)

Sageretia devendrae Pusalkar, Nordic J. Bot. 28(1): 51. 2010. (RHAMNACEAE)

Sageretia santapau Pusalkar & D.K. Singh, Nordic J. Bot. 28(1): 49. 2010. (RHAMNACEAE)

Spilanthes ghoshinis Sheela, J. Econ. Taxon. Bot. 34(4): 799. 2010. (ASTEFIACEAE)

Stylidium darwinii Puneekar & Lakshmin., J. Bot. Res. Inst. Texas 4(1): 69. 2010. (STYLIDIACEAE)

Theriophonum danielii T.J.S. Rajkumar, R. Selvakumari, S. Murugesan & N. Chellaperumal, Indian
J. Forest. 33(4): 447. 2010. (ARACEAE)

Udora fernandesii M.R. Almeida & S.M. Almeida, Fl. Maharashtra 5A: 6. 2009.
(HYDROCHARITACEAE)

Zeuxine chowdherii Av. Bhattacharjee & C.M. Sabapathy, *Taiwania* 55(4): 342. 2010.
(ORCHIDACEAE)

Zingiber anamalayanum Sujanapal & Sasidh., *Nordic J. Bot.* 28(3): 289. 2010.
(ZINGIBERACEAE)

NEW VARIETIES

Corydalis vaginans Royle var. **jadagangensis** Pusalkar & D.K. Singh, *Indian J. Forest.* 33(2): 193. 2010. (FUMARIACEAE)

Dendrobium falconeri Hook. var. **senapatianum** C. Deori, R. Gogoi & A.A. Mao, *Orchid Review* 118 (1289): 21. 2010. (ORCHIDACEAE)

Desmos chinensis Lour. var. **jarawae** Chakrab. & P.G. Diwakar, *J. Econ. Taxon. Bot.* 34(4): 812. 2010. (ANNONACEAE)

Morus macroua Miq. var. **laxiflora** G.K. Upadhyay & A.A. Ansari, *Rheedea* 20 (1): 44. 2010.
(MORACEAE)

Rungia linifolia Nees var. **saldanhae** Mascar. & Janarth., *Novon* 20(2): 182. 2010.
(ACANTHACEAE)

Scoparia dulcis var. **abrahmii** Pardeshi & Srinivasu, *Nelumbo* 51: 231. 2009.
(SCROPHULARIACEAE)

NEW SUBSPECIES

Lindernia ciliata (Colsm.) Pennell subsp. **sivarajanii** Tandyekk. & N. Mohanan, *Nordic J. Bot.* 28(2): 202. 2010. (SCROPHULARIACEAE)

Tibetoseris depressa (Hook.f. & Thomson) Sennikov subsp. **gauri** D. Maity, *Candollea* 65(2): 212. 2010. (ASTERACEAE).

NEW FORMA

Paphiopedilum spicerianum Pfltz. f. **burkhardii** O. Gruss & Roeth, *Orchidee (Hamburg)* 61(2): 135. 2010. (ORCHIDACEAE)

NEW DISTRIBUTIONAL RECORDS

Antiaris toxicaria subsp. **macrophylla** (MORACEAE) published by G.K. Upadhyay, S.K. Srivastava & A.A. Ansari in *J. Jap. Bot.* 85: 355. 2010

Arnebia linearifolia A.DC. (BORAGINACEAE) published by Kumar Ambrish and S.K. Srivastava in

Indian J. Forest. 33 (4): 651. 2010.

Artocarpus dadah Miq. (MORACEAE) published by G.K. Upadhyay and A.A. Ansari in Indian Forester 138 (4): 539. 2010.

Begonia limprichtii Irmsch. (BEGONIACEAE) published by Rekha Morris in Begonian 77: 214. 2010.

Bulbophyllum apodum Hook.f. (ORCHIDACEAE) published by K. Karthigeyan, J. Jayanthi and R. Sumathi in Taiwania 55(1): 83. 2010.

Bulbophyllum bakhuzenii Steenis (ORCHIDACEAE) published by K. Karthigeyan., J. Jayanthi and R. Sumathi in Taiwania 55(1): 83. 2010.

Bulbophyllum longibracteatum Seidenf. (ORCHIDACEAE) published by K. Karthigeyan, J. Jayanthi and R. Sumathi in Taiwania 55(1): 83. 2010.

Campylanthus pungens O. Schwartz (SCROPHULARIACEAE) published by Pankaj N. Joshi, S.F.W. Sunderraj, Justus Joshua and Rajendra Kumar in Indian J. Forest. 33(1): 115. 2010.

Chimonocalamus longiusculus Hsueh & T.P. Yi (POACEAE) published by A.A. Mao and M. Bhaumik in Nelumbo 52: 151. 2010.

Combretum tetragonocarpum Kurz var. **tetralophum** (C.B. Clarke) M. Gangop. & Chakrab. (COMBRETACEAE) published by L. Rasingam and R.P. Pandey in Nelumbo 51: 211. 2009.

Corydalis govaniana Wall. var. **swatensis** (Kitam.) Jafri (FUMARIACEAE) published by P.K. Pusalkar & D.K. Singh in Indian J. Forest. 33(2): 194. 2010.

Corydalis meifolia Wall. var. **ecristata** C.Y. Wu & Z.Y. Su (FUMARIACEAE) published by P.K. Pusalkar & D.K. Singh in Nelumbo 52:138-140. 2010.

Cotinus coggygaria Scop. var. **glaucophylla** C.Y. Wu (ANACARDIACEAE) published by P.K. Pusalkar & D.K. Singh in Ann. For. 18(1): 56. 2010.

Crotalaria incana L. subsp. **purpurascens** (Lam.) Milne-Redh. (FABACEAE) published by M. Abdull Jabbar, M.V. Krishnaraj and N. Mohanan in Rheedea 20(1): 131. 2010.

Dendrobium salaccense (Blume) Lindl. (ORCHIDACEAE) published by S. Zote, H. Lalramnghinglova and Chaya Deori in J. Orchid. Soc. India 23(1-2): 91. 2009.

Fallopia dentatoalata (F. Schmidt) Holub (POLYGONACEAE) published by R.K. Choudhary, Krishnan Lal and Joongku Lee in Indian J. Forest. 33(3): 613. 2010.

Geodorum attenuatum Griff. (ORCHIDACEAE) published by Sarat Mishra, S.P. Panda, P.K. Nayak and D. Sahu in Indian J. Forest. 33(1): 99. 2010.

Ipomoea lacunosa L. (CONVOLVULACEAE) published by P.C. Panda, P.K. Acharya and A.K.

Debata in J. Econ. Taxon. Bot. 34(2): 402. 2010.

Ludwigia decurrens Walt. (ONAGRACEAE) published by I.C. Barua in Rheedea 20(1): 60. 2010.

Medinilla speciosa (Reinw. ex Blume) Blume (MELASTOMATACEAE) published by J. Jayanthi, K. Karthigeyan, R. Sumathi and D. Narasimhan in Indian J. Forest. 33(2): 245. 2010.

Sinocrassula indica (Decne.) A. Berger var. **viridiflora** K.T. Fu (CRASSULACEAE) published by P.K. Pusalkar and D.K. Singh in Ann. For. 18(1): 59. 2010.

Stemona curtisii Hook.f. (STEMONACEAE) published by C. Murugan in Rheedea 20(1): 77. 2010.

Zeuxine grandis Seidenf. (ORCHIDACEAE) published by Avishek Bhattacharjee and H.J. Chowdhery in Taiwania 55(3): 315. 2010

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 12 per cent of the total fern species of the world.

In the present state of our knowledge India has about 1,261 species of ferns and Fern-allies. Many more are yet to be identified and described.

The collated information presented here includes 3 new species (one each from Uttarakhand, Meghalaya and Rajasthan) 22 species and 01 subspecies as new distributional record.

NEW SPECIES

Aleuritopteris punethae Kholia, Bhakuni & R. Punetha, Telopea 12(4): 486.2010. (ADIANTACEAE)

Ophioglossum indicum B.L. Yadav & H.K. Goswami, Bull. Natl. Mus. Nat. Sci., Ser. B, 36(4): 155-159. 2010. (OPHIOGLOSSACEAE)

Pteris mawsmiensis Fras. Jenk. & Benniamin, Pb. Univ. Res.J. (Sc.) 59: 8. 2009. (PTERIDACEAE)

NEW DISTRIBUTIONAL RECORDS

Aleuritopteris duclouxii (Christ) Ching (PTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 6. 2009.

Angiopteris palmiformis (Cav.) C. Chr. (MARATTIACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 3. 2009.

Athyrium dissitifolium (Baker) C. Chr. (WOODSIACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 12. 2009.

Athyrium nakanoi Makino (WOODSIACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 12. 2009.

Bolbitis medogensis (Ching & S.K. Wu) S.Y. Dong (LOMARIOPSIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 21. 2009.

Bolbitis tibetica Ching & S.K. Wu (LOMARIOPSIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 21. 2009.

Ctenitis paucisora (Copel.) Copel. (DRYOPTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 13. 2009.

Dryopteris namegatae (Sa. Kurata) Sa. Kurata (DRYOPTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 16. 2009.

Dryopteris rubrobrunnea W.M. Chu (DRYOPTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 16. 2009.

Gymnocarpium oyamense (Baker) Ching (WOODSIACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 13. 2009.

Huperzia quasipolytrichoides (Hayata) Ching (LYCOPODIACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 2. 2009.

Lepisorus thunbergianus (Kaulf.) Ching (POLYPODIACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 4. 2009.

Notholaena borealisinensis (Kitag.) Fras.-Jenk. (PTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 7. 2009.

Osmunda cinnamomea L. subsp. *asiatica* (Fernald) Fras.-Jenk. (OSMUNDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 3. 2009.

Pteris assamica Fras.-Jenk. & T.G. Walker (PTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 7. 2009.

Pteris cadieri Christ (PTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 7. 2009.

Pteris hirtula (C. Chr.) C.V. Morton (PTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 8. 2009.

Pteris taiwanensis Ching (PTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 9. 2009.

Tectaria ternifolia (Alderw.) C. Chr. (DRYOPTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 20. 2009.

Thelypteris megacuspis (Baker) C.F. Reed (THELYPTERIDACEAE) published by C.R. Fraser-Jenkins

and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 11. 2009.

Thelypteris paludosa (Blume) K. Iwats. (THELYPTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 10. 2009.

Thelypteris repanda (Fee) Tagawa & K. Iwats. (THELYPTERIDACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 11. 2009.

Trichomanes parvifolium (Baker) Copel. (HYMENOPHYLLACEAE) published by C.R. Fraser-Jenkins and A. Benniamin in Punjab Univ. Res. J. (Sci.) 59: 11. 2009.

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 2,461 species of bryophytes. Many more are yet to be identified and described.

The collated information presented here includes 01 new genus from Kerala, Silent Valley National Park, Western Ghats 5 new species from India (01 species from Tamil Nadu, 01 from Karnataka, 01 from Kerala, 01 from Darjeeling District, West Bengal, 01 from Sikkim). 1 variety from Sikkim and 05 New distributional records.

NEW GENUS

Indopotia A.E.D. Daniels, R.D.A. Raja & P. Daniel in J. Bryol. 32: 216. 2010. (POTTIACEAE)

NEW SPECIES

Cololejeunea epiphylla G. Asthana & A. Shukla, Cryptog. Bryol. 31(2): 218. 2010. (LEJEUNEACEAE)

Indopotia zanderi A.E.D. Daniels, R.D.A. Raja & P. Daniel, J. Bryol. 32: 216. 2010. (POTTIACEAE)

Leptolejeunea mirikana M. Dey & D.K. Singh, Taiwania 55(4): 355. 2010. (LEJEUNEACEAE)

Leptolejeunea udarii M. Dey & D.K. Singh, Taiwania 55(4): 359. 2010. (LEJEUNEACEAE)

Spruceanthus wiggintonii A.E.D. Daniels, K.C. Kariappa & P. Daniels, Cryptog. Bryol. 31(2): 121. 2010. (LEJEUNEACEAE)

NEW VARIETY

Notoscyphus darjeelingensis Udar & A. Kumar var. **sikkimensis** D. Singh, D.K. Singh & A. Kumar, Indian. J. Forest. 33(1): 93. 2010. (JUNGERMANNIACEAE)

NEW DISTRIBUTIONAL RECORDS

GENUS

Tuyamaella S. Hatt. (LEJEUNEACEAE) published by D.K. Singh and Monalisa Dey in Nelumbo 52: 135. 2010.

SPECIES

Cololejeunea macounii (Spruce ex Underw.) A. Evans (LEJEUNEACEAE) published by Monalisa Dey, Devendra Singh and D.K. Singh in Indian J. Forest. 33(3): 615. 2010.

Cololejeunea ocellata (Horik.) Benedix (LEJEUNEACEAE) published by Monalisa Dey, Devendra Singh and D.K. Singh in Indian J. Forest. 33(3): 616. 2010.

Leptolejeunea apiculata (Horik.) S. Hatt. (LEJEUNEACEAE) published by D. Singh, Monalisa Dey and D.K. Singh in Indian J. Forest. 33(3): 395. 2010.

Trachyphyllum dusenii (Mull.Hal. ex Broth.) Broth. (ENTODONTACEAE) published by K.C. Kariyappa and A.E.D. Daniels in Nelumbo 52: 131. 2010.

Tuyamaella serratistipa S. Hatt. (LEJEUNEACEAE) published by D.K. Singh and Monalisa Dey in Nelumbo 52: 135. 2010.

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 16 per cent of the total species of the world.

In the present state of our knowledge India has about 2,292 species of lichens. Many more are yet to be identified and described.

The collated information presented here includes 04 new species (01 Species from Karnataka, 01 from Tamil Nadu, 01 from West Bengal, 01 from Arunachal Pradesh) and 20 new distributional records of Lichens from India.

NEW SPECIES

Anomomorpha elegans B.O. Sharma, Makhija & Khadilkar, Lichenologist 42(3): 281. 2010.
(GRAPHIDACEAE)

Carbacanthographis sorediata B.O. Sharma, Makhija & Khadilkar, Lichenologist 42(3): 393.
2010. (GRAPHIDACEAE)

Leiorreuma subpatellulum Dubey, Upreti & Nayaka, Lichenologist 42(6): 711. 2010.
(GRAPHIDACEAE)

Pyrenula darjeelingensis Jagadeesh & G.P. Sinha, Lichenologist 42(1): 51. 2010.
(PYRENULACEAE)

NEW DISTRIBUTIONAL RECORDS

Chapsa pseudophlyctis (Nyl.) A. Frisch (THELOTREMATAACEAE) published by T.A.M. Jagadeesh
Ram and G.P. Sinha in Indian J. Forest. 32(4): 635. 2009.

Fissurina elaiocarpa (A.W. Archer) A.W. Archer (GRAPHIDACEAE) published by T.A.M.
Jagadeesh Ram and G.P. Sinha in Indian J. Forest. 32(4): 635. 2009.

Helminthocarpon leprevostii Fee (ARTHONIACEAE) published by T.A.M. Jagadeesh Ram and
G.P. Sinha in Indian J. Forest. 32(4): 636. 2009.

Lecanographa laingiana Diederich, Egea & Sipman (ROCCCELLACEAE) published by T.A.M.
Jagadeesh Ram and G.P. Sinha in Phytotaxonomy 9: 7. 2009.

Lithothelium illotum (Nyl.) Aptroot (PYRENULACEAE) published by T.A.M. Jagadeesh Ram and
G.P. Sinha in Indian J. Forest. 32(4): 637. 2009.

Mycomicrothelia minutula (Zahlbr.) D. Hawksw. (ARTHOPYRENIACEAE) published by T.A.M.
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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 14,613 species of fungi. Many more are yet to be identified and described.

The collated information presented here includes 01 new genus 25 new species from India (10 species from Kerala, 01 species from Maharashtra, 01 species from Karnataka, 03 species from Goa, 1 species from Himachal Pradesh, 03 species from Madhya Pradesh, 1 species from Sikkim, 03 species from un-known location) and 01 genus and 02 species as new distributional record for India.

NEW GENUS

Bheemamyces Hosag., A. Sabeena & M.C. Riju, *J. Threatened Taxa* 2(12): 1323. 2010. (ASTERINACEAE)

NEW SPECIES

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Russula khanchanjungae Van de Putte, K. Das & Buyck, Cryptog. Mycol. 31(4): 381. 2010.
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Schiffnerula braunii Hosag. & A. Sabeena, Taiwania 55(3): 251. 2010. (ENGLERULACEAE)

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Stauriella indica J. Pratibha, S. Raghukumar & D. J. Bhat, Mycotaxon 113: 301. 2010.

Stictis subbrachyspora S. Joshi, D.K. Upreti & S. Nayaka, Mycotaxon 113: 158. 2010.
(LECANOROMYCETES)

NEW DISTRIBUTIONAL RECORDS

GENUS

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SPECIES

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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 7,184 species of algae. Many more are yet to be identified and described.

The collated information presented here includes 2 new species (01 from Madhya Pradesh and 01 from Sikkim).

NEW SPECIES

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Stigeoclonium iyengarii R.K. Gupta & D. Singh in *Indian J. Forest.* 33(3): 401. 2010. (CHAETOPHORACEAE)

MICROBES

Out of the estimated 50,000 - 3,000,000 species of bacteria and archaea, only about 8050 species have been described globally. About 937 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 06 new genera 32 new species of microbes from India.

NEW GENERA

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NEW SPECIES

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