

Some lichens of Bangladesh

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ABSTRACT. Lichens collected from Bangladesh in 1968 and 2002 are reported, the first published account for the country. In all, 51 species could be identified, most of which are pantropical (75%), four are cosmopolitan, and one uncertain species is restricted to Eurasia. Only one species, *Ocellularia keralensis*, is probably restricted to the Indian subcontinent, while three are restricted to tropical Asia and three are palaeotropical. The lichen flora appears to be a poor, wet lowland tropical one.

KEYWORDS. Indian subcontinent, flora, biogeography.



Bangladesh is a wet tropical country at the eastern end of the Indian subcontinent. Most of the country is lowland and influenced by a large delta. Its lichen flora is largely unknown. This is the first paper for this country, only two species of the 2002 collection being reported in monographic works, viz. *Enterographa tropica* Sparrius (Sparrius 2004: 62) and *Stirtonia macrocarpa* Makhija & Patw. (Aptroot 2009: 620). Specimens from West Bengal have sometimes been erroneously reported to originate from Bangladesh (e.g. Mayrhofer 1984: 446).

This contribution is based on collections made in 1968 by S.H. Iqbal (deposited in SHI) and in 2002, by the late H. Hopman (ABL, except for the Graphidaceae and the Arthoniales, which are in B). Only relatively few localities were visited by each collector, but the lichen diversity was low on each spot, and partly overlapping between the localities.

Of all specimens collected by Iqbal, photographs are made which are posted on www.tropicallichens.net.

To date, 51 species could be identified, mostly pantropical elements (over 75% of the species), with four cosmopolitan ones and one uncertain species restricted to Eurasia. Only one species, *Ocellularia keralensis*, appears to be restricted to the Indian subcontinent, while three are restricted to tropical Asia and three are palaeotropical. The total lichen biodiversity of Bangladesh is certainly higher, but still overall likely not very diverse, because much of the land is densely inhabited and its geomorphology and climate varies little. Besides the species reported here, the material contains samples of several unidentifiable species.

THE SPECIES

- Anisomeridium subnectendum* (Nyl.) R.C. Harris:
palaeotropical; on bark; Sheishak, "26-7-1966",
Iqbal Asc-151.
Anisomeridium subprostans (Nyl.) R.C. Harris:
pantropical; on bark; Dhaka, in the city, 5 March
2002, Hopman s.n.

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- Anthracothecium macrosporum* (Hepp) Müll. Arg.; pantropical on *Daryadia* bark; Sheishak, 17 April 1968, Iqbal L-04.
- Arthonia complanata* (Fée) Nyl.; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1478BD.
- Arthonia cinnabarina* (DC.) Wallr.; cosmopolitan; on bark; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Arthonia rubella* (Fée) Nyl. probably pantropical (tentative identification); on bark; Daryadhigee, 16 April 1968, Iqbal L-1249; Souargoau, 20 km SE of Dhaka, 11 March 2002, Hopman s.n.
- Arthonia spadicea* Leighton; possibly cosmopolitan (tentative identification); on bark; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Bacidia delicata* (Larbal. ex Leighton) Coppins; possibly cosmopolitan; on bark; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Bactrospora myriadea* (Fée) Egea & Torrente; pantropical; on bark; Souargoau, 20 km SE of Dhaka, 11 March 2002, Hopman s.n.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Buellia efflorescens* Müll. Arg.; pantropical; on bark; along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Buellia placodiomorpha* Vain.; probably pantropical; on bark; Dhaka, in the city, 5 March 2002, Hopman s.n.; along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Caloplaca bassiae* (Ach.) Zahlbr.; pantropical; on bark; along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Chrysotrichia xanthina* (Vain.) Kalb; pantropical; on bark; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Cresponea flava* (Vain.) Egea & Torrente; pantropical; on bark; along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Cryptothecia scripta* G. Thor; palaeotropical; on bark; Sheishak, 11 April 1968, Iqbal 1239bd.
- Cryptothecia subnidulans* Stirt.; pantropical; on bark; along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Diorygma junghuhnii* (Mont. & Bosch) Kalb, Staiger & Elix; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1256b-bd p.p.; Bhawal National park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Dirinaria aegialita* (Afze. ex Ach.) B.J. Moore; pantropical; on bark; Daryadhigee, 16 April 1968, Iqbal L-858 & L-859bd.
- Dirinaria appplanata* (Fée) D.D. Awasthi; pantropical; on bark; Souargoau, 20 km SE of Dhaka, 11 March 2002, Hopman s.n.
- Dirinaria picta* (Sw.) Schaer. ex Clem. & Shear; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1255bd p.p.; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Dyplolabia afzelii* (Ach.) A. Massal.; pantropical. on bark; Daryadhigee, 15 April 1968, Iqbal L-1248c-bd p.p.
- Echinoplaca leucotrichoides* (Vain.) R. Sant.; pantropical; foliicolous; along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Enterographa tropica* Sparrius; restricted to tropical SE Asia, previously reported by Sparrius (2004: 62); on bark; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Glyphis scyphulifera* (Ach.) Staiger; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1255bd p.p.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Graphis caesiella* Vain.; pantropical; on bark; Bhawal National park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Graphis librata* C. Knight; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1255bd p.p.; Dhaka, in the city, 5 March 2002, Hopman s.n.
- Hemithecium chrysenteron* (Mont.) Trevis.; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1254bd & L-1257a-bd.
- Herpothallon philippinum* (Vain.) Aptroot & Lücking; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1241bd.
- Lecanora leprosa* Fée; pantropical; on bark; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.; Dhaka, in the city, 5 March

- 2002, Hopman s.n.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Leptotrema zollingeri* Mont. & Bosch; restricted to tropical Asia; on bark; Sheishak, 12 April 1968, Iqbal 1298 & 1298bd.
- Letrouitia flavocrocea* (Nyl.) Hafellner & Bellem.; pantropical; on bark; Coxes Bazar, 14 April 1968, Iqbal L-1243bd & L-1235; Daryadhigee, 17 April 1968, Iqbal L-857, L-857bd, L-1414 p.p. & L-205ep.
- Malcolmia vinosa* (Eschw.) Kalb & Lücking; pantropical; on bark; Daryadhigee, 17 April 1968, Iqbal L-1240bd & 15 April 1968, Iqbal L-855bd & L-03bd.
- Ocelularia keralensis* Patw. & C.R. Kulk. ex Hale; restricted to tropical Asia; so far known only from the Indian subcontinent; on bark; Daryadhigee, 15 April 1968, Iqbal L-1296bd.
- Parmotrema tinctorum* (Despr. ex Nyl.) Hale; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1257-bd.
- Pertusaria ilicicola* Harm.; Eurasian; tentative identification; on bark; Sheishak, 10 April 1968, Iqbal 1259bd; Daryadhigee, 17 April 1968, Iqbal L-1250 & L-502bd.
- Pertusaria pustulata* (Ach.) Duby; probably cosmopolitan; on bark; Coxes Bazar, 15 April 1968, Iqbal L-1243a p.p.
- Phyllopsora chlorophaeae* (Müll. Arg.) Zahlbr.; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1262bd; Daryadhigee, 17 April 1968, Iqbal L-1244, L-1414 p.p., L-1235-a & L-1235-b.
- Phyllopsora confusa* Swinscow & Krog; pantropical; on bark; Daryadhigee, 17 April 1968, Iqbal L-1414 p.p. & L-855bd.
- Physcia cylindrophora* (Taylor) Hue; restricted to tropical SE Asia and Fiji; on bark; Daryadhigee, 17 April 1968, Iqbal L-1232bd & L-856bd.
- Pyrenula anomala* (Ach.) Vain.; pantropical; on bark; Coxes Bazar, 15 April 1968, Iqbal L-863bd-b; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Pyrenula concatenans* (Nyl.) R.C. Harris; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1285bd; Daryadhigee, 15 April 1968, Iqbal L-1270bd.
- Pyrenula mamillana* (Ach.) Trevis.; pantropical; on bark; Coxes Bazar, 14 April 1968, Iqbal L-580.
- Pyxine cocoës* (Sw.) Nyl.; pantropical; on bark; Bhawal National Park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.; Dhaka, in the city, 5 March 2002, Hopman s.n.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Pyxine retirugella* Nyl.; pantropical; on bark; Coxes Bazar, 15 April 1968, Iqbal L-1243a p.p.
- Relicinopsis malaccensis* (Nyl.) Elix & Verdon; palaeotropical; on bark; Sheishak, 10 April 1968, Iqbal L-1260bd; Daryadhigee, 15 April 1968, Iqbal L-1248c-bd p.p.
- Sarcographa intricans* (Nyl.) Müll. Arg.; pantropical; on bark; Bhawal National park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Stirtonia macrocarpa* Makhija & Patw.; palaeotropical, previously reported by Aptroot (2009: 620); on bark; Sheishak, 10 April 1968, Iqbal L-1263bd; Daryadhigee, 17 April 1968, Iqbal L-861bd & 15 April 1968, Iqbal L-1297bd; Bhawal National park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Thecaria quassiaecola* Féé; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1256b-bd p.p.
- Trypethelium eluteriae* Sprengel; pantropical; on bark; Sheishak, 10 April 1968, Iqbal L-1233bd (2x); Bhawal National park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.
- Trypethelium nitidiusculum* (Nyl.) R.C. Harris; pantropical; on bark; along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.
- Trypethelium tropicum* (Ach.) Müll. Arg.; pantropical; on bark; Bhawal National park, 60 km N of Dhaka, 9 March 2002, Hopman s.n.; Along road E of Tongi, 20 km N of Dhaka, 13 March 2002, Hopman s.n.

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