

NEW *CERCOSPORA* SPP. FROM WEST BENGAL. VI.

By

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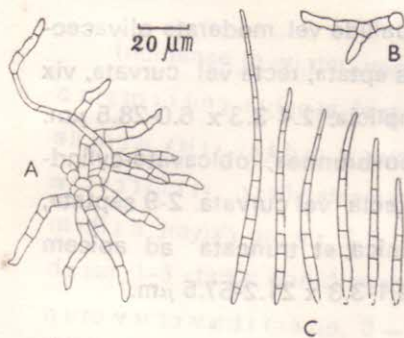
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(With 5 Text-figures)

Five new species of *Cercospora* from West Bengal, India, are described and figured.

Five new species of *Cercospora* have been collected from their respective localities of West Bengal during 1978. The hosts belong to the families Comaceae, Moraceae, Myrtaceae, Rubiaceae and Rutaceae. Specimens were dried and preserved for study following standard techniques (Kar & Mandal, 1959). A review of literature and confirmation received, from the Commonwealth Mycological Institute, Kew, Surrey, England, indicate that all these fungi are new species of *Cercospora*. Type specimens are deposited at IML. Particulars of the types are given along with the description of each species.

Cercospora alangii sp. nov. (Text-fig. 1)



Text-fig. 1. *Cercospora alangii*. A, Stroma with conidiophores; B, conidiophore; C, conidia.

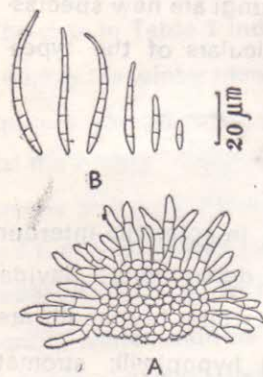
Maculae typicae nullae, in epiphyllis interdum sed discolorationes in determinatas flavidas efficientes in epiphyllis interdum brunneoflavae, 3-7 mm latae; caespituli hypophylli; stromata plerumque linearia, denique stomata complentia, olivaceo-brunnea, 8.1-19.6 μm lata; conidiophora laxe fasciculata, pallide vel moderate olivaceobrunnea, 0-7 septata, recta vel leniter curvata, interdum 1-2 geniculata, vix ramosa, 3.0-4.5 X 9.0-39.3 μm; conidia pallidissime olivaceo-brunnea,

obclavata vel obclavato-cylindracea, 1-17 septata, recta vel leniter curvata, ad basim obconica, ad apicem subacuta vel obtusa, $2.4-3.1 \times 21.2-103.0 \mu\text{m}$.

Incidence in winter, very virulent; spots formed on lamina; spots few, irregularly roundish, immarginate, scattered to coalescent, yellowish discolourations sometimes brownish yellow on upper surface, 3-7 mm in extent; fruiting hypophyllous, stromatic; stromata mostly linear, arising through stomata, slight to small, medium olivaceous brown, $8.1-19.6 \mu\text{m}$ in extent; stalks fasciculate, fascicles not dense, 1-6 stalks; conidiophores pale to medium olivaceous brown, 0-7 septate, straight to curved, occasionally 1-2 geniculate, rarely once branched 0-7 small indistinct spore scars, $3.0-4.5 \times 9.0-39.3 \mu\text{m}$; conidia very pale olivaceous brown, obclavate to obclavato-cylindric, 1-17 septate, straight to slightly curved, base obconic with minute truncation and scar, tip subacute to obtuse, $2.4-3.1 \times 21.2-103.0 \mu\text{m}$.

On *Alangium salviifolium* (Linn. f.) Wang, Ghatal, Midnapur, West Bengal, India, 25 Jan. 1978, IMI 223649, type.

Cercospora strebli sp. nov. (Text-fig. 2)



Text-fig. 2. *Cercospora strebli*.

A. Stromata with conidiophores; B. conidia

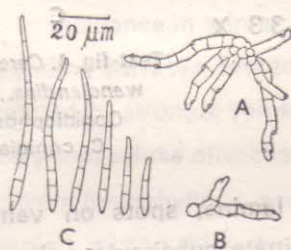
Maculae amphigenae, angulares vel suborbiculares, interdum confluentes et venulis limitatae, sordide brunneae vel brunneo-griseae, 2-5 mm latee; caespituli hypophylli; stromata subglobosa, moderate olivaceo-brunnea, $21.6-51.5 \mu\text{m}$; conidiophora plerumque densissime fasciculata, pallide vel moderate olivaceo-brunnea, 0-3 indistincte septata, recta vel curvata, vix leniter 1-geniculata, simplicia, $2.4-3.3 \times 6.0-28.5 \mu\text{m}$, conidia pallide olivaceo-brunnea, obclavato-cylindracea, vel cylindracea, recta vel curvata, 2-9 septata, ad basim elongato-obconica, et truncata ad apicem sub obtusa vel obtusa, $2.1-3.3 \times 21.2-57.5 \mu\text{m}$.

Incidence in winter, virulent, spots formed on lamina; spots few, on both corresponding surfaces, more prominent on ventral surface, angular to sub-circular, limited by stronger veins, scattered to coalescent, dull brownish; turning greyish at maturity, 2-5 mm in extent; fruiting hypophyllous, stromatic;

stromata small to medium sized, subglobose, compact, pale to medium olivaceous brown, $21.6-51.5 \mu\text{m}$; stalks many, densely fasciculate, divergent; conidiophores pale to medium olivaceous brown, 0.3 indistinctly septate, straight to curved, rarely once geniculate, $2.4-3.3 \times 6.0-28.5 \mu\text{m}$; conidia pale olivaceous brown, obclavato-cylindric to cylindric, straight to curved, 2-9 septate, base slightly elongate obconic with minute truncation, tip subacute to obtuse, $2.1-3.3 \times 21.2-57.3 \mu\text{m}$.

On *Streblus asper* Lour., Ghatal, Midnapur, West Bengal, India, 5 Jan 1978, IMI 226655, type.

Cercospora syzygiae sp. nov. (Text.fig. 3)

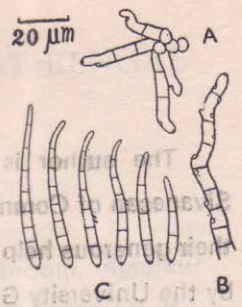


Text-fig. 3. *Cercospora syzygiae*. A, Stroma with 20 μm scale bar; B, conidiophore; C, conidia.

Maculae amphigenae, angulares, interdum confluentes, rubro-brunneae vel brunneo-griseae, 1-20 mm latae; caespituli hypophylli; stromata irregulares, denique stomata complentia, moderate griseo-brunnea, 60-18.1 μm ; conidiophora plerumque 1-5 fasciculata, moderate olivaceo-brunnea, superne saepe pallidiora et attenuata 0-11 septata, recta vel sinuosa, interdum 1-4 geniculata, $4.2-6.0 \times 33.3-122.2 \mu\text{m}$; conidia pallida, olivaceo-brunnea, obclavata vel obclavato-cylindrica, 3-10 septata, recta vel curvata, ad basim obconica, a apicem subobtusa, $3.3-4.0 \times 30.3-66.6 \mu\text{m}$.

Incidence in winter, very virulent, spots formed on lamina; spots on both corresponding surfaces, few to many, scattered to coalescent, angular, limited by stronger veins, reddish brown to brownish grey, 1-20 mm in extent; fruiting hypophyllous, mostly stromatic; stromata arising through stomata, irregular, medium greyish brown, $6.0-13.1 \mu\text{m}$; stalks mostly fasciculate, fascicles not dense, 1-5 stalks; conidiophores medium olivaceous brown, slightly paler and narrower towards the tip, 0-11 septate, straight to sinuous, sometimes 1-4 geniculate, very rarely once branched, with 0-10 medium sized to small spore scars, $4.2-6.0 \times 33.3-121.3 \mu\text{m}$; conidia pale olivaceous brown, obclavate to obclavato-cylindric, 3-10 septate, straight to curved, base short obconic with minute scar, tip subacute, $3.3-4.0 \times 30.3-66.6 \mu\text{m}$.

sufflavæ vel flavo-brunneæ, 2–7 mm latæ; caespituli plerumque hypophylli et effusi olivacei; stromata pallide vel moderate olivaceo-brunnea, benique stomata complentia, irregularia, 6.0–19.3 μ m; conidiophora plerumque 1–6 fasciculata, interdum unica, moderate olivaceo-brunnea, superne saepe pallidiora et attenuata, 0–7 septata, recta vel torta, interdum 1–3 geniculata, vix ramosa, 3.3–4.5 X 6.0–42.4 μ m; conidia pallide olivaceo-brunnea, obclavato-cylindracea, 3–19 septata, recta vel leniter curvata, ad basim obconica et subtruncata, ad apicem subacuta vel subobtusa, 2.4–3.0 X 30.3–97.0 μ m.



Text-fig. 5. *Cercospora glycosmidis* A, Stroma with conidiophores; B, conidiophore; C, conidia.

Incidence in winter, virulent, spots formed on lamina; spots on both corresponding surfaces, few to many, scattered to coalescent, angular, somewhat limited by stronger veins, yellowish brown discolourations, dorsal surface with very thin effuse olivaceous appearance at maturity, 2–7 mm in extent: fruiting chiefly hypophyllous, usually stromatic; stromata pale to medium olivaceous brown, arising through stomata, slight to small, irregular, 6.0–19.3 μ m in extent stalks usually fasciculate, fascicles not dense, 1–6 divergent stalks, nonfasciculate stalks arising from hyphae of stromatic origin; conidiophores medium olivaceous brown, mostly paler and narrower toward the tip, often slightly irregular in width, 0–7 septate, straight to tortuous, occasionally 1–3 geniculate, rarely once branched, 3.3–4.5 X 6.0–42.4 μ m; conidia pale olivaceous brown, obclavato-cylindric, 3–9 septate, straight to slightly curved, base elongate obconic with small truncation, tip subacute to subobtuse, 2.4–3.0 X 30.3–97.0 μ m.

On *Glycosmis pentaphylla* Corr., Ghatal, Midnapur, West Bengal, India, 24 Jan. 1978, IMI 226664, type.

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