A HYPERPARASITE OF
PHYLLACTINIA CORYLEA,
THE POWDERY MILDEW OF MULBERRY

S. SHAMA RAO AND S. B. SULLIA
Department of Botany, Bangalore University
Bangalore 560 056, India

One of the major diseases of mulberry (Morus alba L.) in Karnataka State is the "powdery mildew" caused by Phyllactinia corylea (Pers.) Karst. which mostly manifests in the conidial stage commonly known as Ovalariopsis. In a recent collection of diseased leaves around Bangalore, a hyperparasite infecting the conidiophores and conidia of this fungus was noticed. Hyperparasitism is common in rusts\(^1\)\(^2\) and Monilaceous fungi\(^3\)\(^4\) but a mycoparasite of a powdery mildew is rare. Generally the powdery mildews are parasitised by Ampelomyces quisqualis\(^5\). Recently, two hyperparasites, Alternaria and Cladosporium, have been reported on conidia and mycelia of Acreosporium disnepthoeae parasitising Dendrophthoe falcata\(^6\).

**Fig. 1.** Conidiophores and conidia of Phyllactinia corylea with the hyperparasite Cladosporium sp. A. Uninfected conidiophores and conidia of Phyllactinia corylea (x 450). B. Conidiophores and conidia of Phyllactinia corylea showing the growth of the conidiophores of the hyperparasite (x 450).

**Fig. 2.** Conidiophores and conidia of Phyllactinia corylea with the hyperparasite Cladosporium sp. A. Uninfected conidiophores and conidia of Phyllactinia corylea. B. Conidiophores and conidia of Phyllactinia corylea showing the growth of the conidiophores of the hyperparasite. C. Conidia of the hyperparasite Cladosporium sp.

The present hyperparasite was identified as Cladosporium sp. The conidiophores of this Hyphomycetous fungus were found growing from the conidiophores and conidia of Phyllactinia corylea (Figs. 1 and 2). The conidiophores measured 11–32–48 \(\mu\)m in length and 2–4–6 \(\mu\)m in breadth. The conidia were dark brown, thick walled, 0–1 septate, oval to variable in shape measuring 7–10–14 \(\times\) 4–6–8 \(\mu\)m. A survey of literature shows that this is the first report of Cladosporium sp. on the powdery mildew fungus Phyllactinia corylea.

The authors are thankful to Prof. A. Sheriff, Head of the Department, for facilities and encouragement. One of them (S. S. R.) acknowledges the award of Teacher Fellowship from University Grants Commission under Faculty Improvement Programme.

March 24, 1981.