A HYPERPARASITE OF PHYLLACTINIA CORYLEA, THE POWDERY MILDEW OF MULBERRY

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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 Ovulariopsis. 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 Moniliaceous fungi^{3,4} but a mycoparasite of a powdery mildew is rare. Generally the powdery mildews are parasitised by Ampelomyces quisqualis⁵. Recently, two hyperparasites, Alternaria and Cladosporium, have been reported on conidia and mycelia of Acrosporium dendrophthoae parasitising Dendrophthoae falcata⁶.

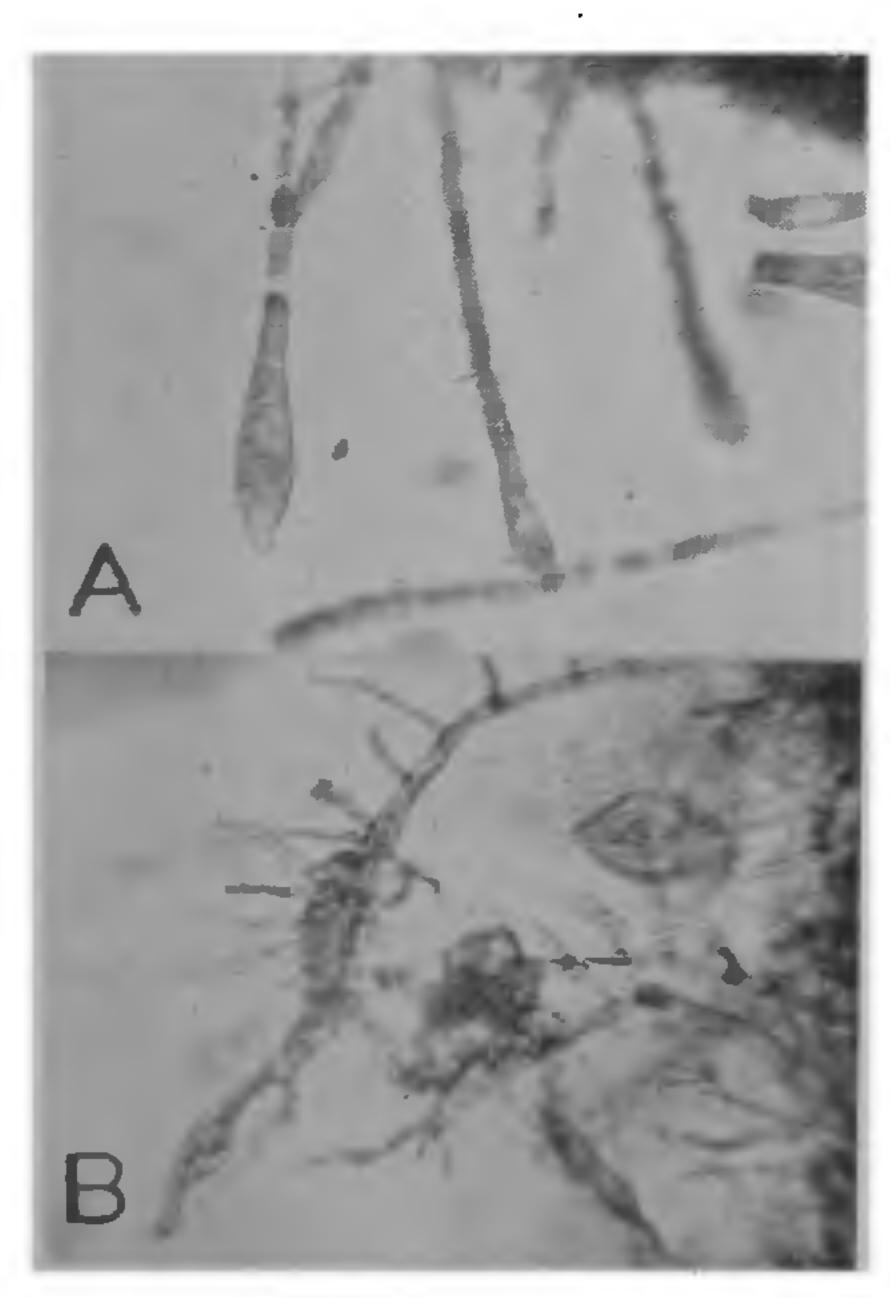


FIG. 1. Conidiophores and conidia of Phyllactinia corylea with the hyperparasite Cladosporium sp. A. Uninfected conidiophores and conidia of Phyllactinia corylea (× 450). B. Conidiophores and conidia of Phyllactinia corylea showing the growth of the conidiophores of the hyperparasite (× 450).

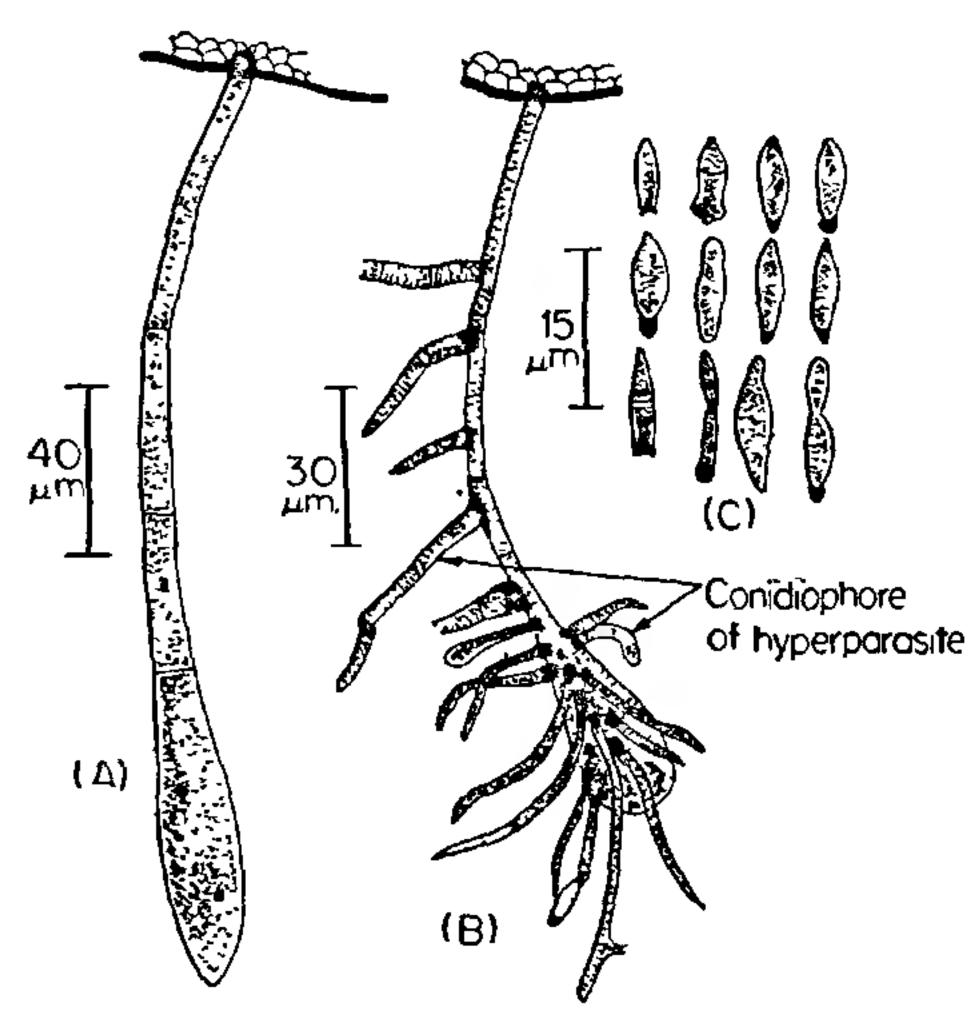


Fig. 2. Conidiophores and conidia of *Phyllactinia* corylea with the hyperparasite *Cladosporium* sp. A. Uninfected conidiophores and conidia of *Phyllactinia* corylea. B. Conidiophores and conidia of *Phyllactinia* corylea showing the growth of the conidiophores of the hyperparasite. C. Conidia of the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

The present hyperparasite was identified as Clado-sporium 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 $11-32-48\,\mu\mathrm{m}$ in length and $2-4-6\,\mu\mathrm{m}$ in breadth. The conidia were dark brown, thick walled, 0-1 septate, oval to variable in shape measuring $7-10-14\times4-6-8\,\mu\mathrm{m}$. A survey of literature shows that this is the first report of Clado-sporium sp. on the powdery mildew fungus Phyllactinia corylea.

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