The *Lecythophora-Coniochaeta* complex

I. Morphological studies on *Lecythophora* species isolated from *Picea abies*

by

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**Abstract:** Some anamorphic species assigned to the genus *Lecythophora* were isolated from wind-thrown stems of *Picea abies* by plating fragments of increment borer cores. Three of them were found to be anamorphs of *Coniochaeta* species, viz. *C. ligniaria*, *C. velutina*, and *C. pulveracea*. Another *Lecythophora* species isolated from bark beetles in conifers, namely the anamorph of *Coniochaeta malacotricha*, was compared. In two further lecythophora-like species no teleomorph was found. The morphology of the *Lecythophora* species is described, illustrated, and used to construct a key. The type specimen of *C. ligniaria* was reexamined and illustrated. The similarity of *L. lignicola* and *L. luteoviridis* to the *Lecythophora* anamorph of *C. velutina* is discussed. Also the members of Schol-Schwarz’s ‘*Phialophora hoffmannii* group’ were studied and compared with the treated species. They were found sufficiently distinct and the new combinations *L. luteoviridis*, *L. fasciculata*, and *L. decumbens* are proposed.

**Key words:** *Coniochaeta*, endophyte, *Lecythophora*, *Phialophora hoffmannii* group, *Picea abies*.

**Introduction**

The originally unispecific genus *Lecythophora* Nannf. was created by Nannfeldt (in Melin & Nannfeldt 1934) with *Lecythophora lignicola* Nannf. as sole species. The author described this species as widely distributed in Sweden in wood pulp and water. He regarded the conidiogenesis from mostly short ‘sterigmata’ occurring laterally on normal vegetative hyphae or apically on swollen ampulliform cells as the main characteristic of the genus and, because of the ampulliform cells, he chose the name *Lecythophora* (from Greek *lekythos* = bottle). Nannfeldt regarded the ‘sterigmata’ as ‘highly reduced phialides, and the conidia as phialospores’.