

Two new species of *Phomites* Fritel from the phyllosphere of Siwalik forest of Arunachal sub-Himalaya

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In situ occurrence of two new species of *Phomites* (comparable to modern plant pathogen *Phoma* Sacc.) have been reported on two angiosperm fossil leaf remains recovered from the upper Siwalik (late Pliocene to early Pleistocene) sediments of Arunachal Pradesh, eastern Himalaya. On the basis of morpho-anatomical details of fruiting bodies i.e. pycnidia, new fungal species i.e. *Phomites arunachalensis* sp. nov. and *Phomites macarangensis* sp. nov. recovered from leaf cuticles comparable to modern *Amherstia* Wall. (Fabaceae) and *Macaranga* Thouars (Euphorbiaceae) have been proposed. Occurrence of these epiphyllous fungal morphotypes indicates a warm and humid tropical climate with high rate of precipitation during Plio-Pleistocene time in the study area.

Key words: Epiphyllous fungus, *Phomites*, leaf compressions, Plio-Pleistocene, Palaeoecology, host-fungus interaction, Arunachal sub-Himalaya
