## Alternaria leaf spot on Ginkgo biloba in Kumaun Himalaya, Uttarakhand

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Ginkgo biloba, a Gymnospermous plant, is an ancient one and virtually having no living relatives, hence rightly said to be a 'living fossil'. During the present study the leaves of Ginkgo biloba were found to be infected by Alternaria alternata.

The fungus attacks only the leaves of the plant. Initially the leaves show minute, light brown punctuation in the centre. Leaf spots are mostly light brown in colour and later turn dark brown. Discrete older lesions are circular to irregular and reach a diameter of 3-10mm. In later stages the central portions commonly become scarious and in few cases these portions fall off giving a shot hole like appearance (Plate 1a).

On potato dextrose agar medium the hyphae of the fungus were sub hyaline to olivaceous, branched, septate, greenish grey to black in mass (Plate 1b). Conidia, borne in acropetal chains, were pale olivaceous to olivaceous black, muriform and measure 20-38 x 9-15 µm. The morphological characters of the fungus was found to agree *Alternaria alternata* Fr. Keissler and the identification was confirmed by Indian Agricultural Research



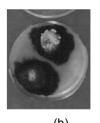


Plate 1.(a) Ginkgo biloba leaves infected with Alternaria alternata. (b) Alternaria alternata growing on potato dextrose agar medium

Institute, New Delhi (HCIO No. 45594). By the pathogenicity test, performed in the laboratory *Alternaria alternata* was confirmed to be the pathogenic fungus for *Ginkgo biloba*.

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