## A Note on Dieback Disease of Neem

Neem (*Azadiracta indica* A.Jussieseu) is one of the most valuable trees in the arid and semi-arid tropics. Neem is well known for its multiple uses. The die-back causing pathogen affects the apical and there by the straight growth of the main stem will be affected. This will result in the production of poor quality timber.

Field survey conducted during the last two years has shown that there is a serious dieback disease on neem trees on all ages in and around Bijapur district. It has caused major loss (more than 80%) of fruit production in severely infected trees.

Aseptic isolation from the diseased twigs throughout the year yielded the same fungus. The pathogen has been recently identified as *Phomopsis azadiractae* (Sateesh *et al.*,1997) based on the distinctive cultural and morphological characteristics. *Phomopsis azadiractae* was isolated from the diseased twigs once in every 20 days during 2000& 2001 by inoculating the surface sterilized infected bits on PDA medium (Dhingra & Sinclair, 1995). Pathogenicity test was carried out by inoculating aseptically raised three month old seedlings of

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## A.indica with wounds made by sterile needle. The wounds were inoculated with sterile cotton swabs dipped in conidial suspension of P. azadiractae at spore concentration of 1x 10<sup>6</sup> per ml in sterile distilled water. The control plants were inoculated by using sterile distilled water alone. Healthy branches of neem trees growth under natural conditions were also ioculated in the same method with similar spore concentration and the wounds were covered by wet sterile cotton. The observation was recorded for the symptom expression at regular intervals indicated that, stems of the seedlings and the branches of the field grown trees showed drying after 25 days of inoculation. On inoculated stem, blighted symptoms followed by production of pycnidia an conidia were noticed. The pathogen produced blight symptoms on twig, leaflet and inflorescence.

*Phomopsis azadiractae* was reisolated from the artificially inoculated parts. Persistent isolation from diseased trees, artificial inoculation during the present study confirm the fungus as pathogenic to *Azadiracta indica*. It is a new report of it's kind for this region.

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## References

DHINGRA, O.D. AND SINCLAIR, J.B., 1995, *Basic Plant Pathology Methods*. CRC Press, Inc. Lewis Publishers, Boca Raton, pp-308-315. SATEESH,M.K., BHAT, S.S. AND DEVAKI, N.S.1997, Fungi in Foresty Ecosystem. *Mycotaxon*,**65**: 517-520