

morphotypes developed from cotyledonary callus had rudimentary leaves on the nodes developed (figure 8).

The present study reveals that the *in vitro* technique is of immense use for induction of morphological variations in the species. Screening of such plants on the basis of their capacity to withstand drought, profuse growth and with better timber and fuel quality for selection of such phenotypes will be of practical significance. The study also provides hope for propagation of the selected genotypes of the species through *in vitro* culture technique as it is easy to regenerate multiple shoots from callus of any explant using tissue culture technique in the species.

Further studies are in progress to determine the cause of variability under *in vitro* conditions.

12 February 1988; Revised 26 April 1988

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A NEW HOST RECORD FOR *COLLETOTRICHUM GLOESPORIOIDES* (PENZ.) PENZ. AND SACC. FROM INDIA

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PONGAMIA PINNATA is extensively grown not only as a shade plant but also for its green manure in agriculture. It is known to suffer from some

diseases. In the recent past a new blight has been recorded in the forest nursery of this college.

The disease manifested as small isolated brown to dark brown, regular to irregular lesions on 10–12 months old seedlings. Such lesions rapidly enlarged, coalesced and formed irregular patches, more so, towards the tips and margins of infected foliage. Tissue isolation from the infected lesions consistently yielded *Colletotrichum* species. Pathogenicity of the isolate was tested on leaves of healthy plants. Typical symptoms appeared after 6 days of inoculation. Based on morphological characters, the pathogen was identified as *Colletotrichum gloeosporioides* (Penz.) Penz. and Sacc. and was confirmed with CMI (IMI 315759). Though *C. gloeosporioides* has been reported on several hosts in India¹, there is no record of the same on *P. pinnata* and hence this is a new record.

This note forms part of the M.Sc. (Agric.) thesis submitted by MNB to University of Agricultural Sciences, Dharwad.

17 February 1988

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AZIDE RESISTANCE AND ROLE OF VARIOUS METABOLITES ON AZOTOBACTER GROWTH

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AZOTOBACTER species are free-living aerobic nitrogen-fixing bacteria which provide an attractive choice for beneficial use in agriculture. However, before this bacterium can be used, it is necessary to understand the factors that influence its growth characteristics. Biological nitrogen fixation, one of its useful properties, is mediated through nitrogenase which is repressed by ammonia¹. Sodium azide acts as a substrate for this enzyme² and can be used for selecting nitrogenase derepressed strains of nitrogen-fixing organisms in combination with excess ammonia³. We have used this procedure for selecting derepressed strains in wild type and auxotrophic mutants of *Azotobacter chroococcum*. In this communication, we report the effect of some chemicals and metabolites on the growth of mutants