appeared especially in flooded soil samples when carbofuran was treated only at 0.5 kg ha^{-1} level, the reason for which is not clearly understood. This observation is in contrast to the reported total restriction of unicellular algae with the addition of carbaryl to the soil[6]. Thus, the present investigation reveals that carbofuran application, at close to field rates, is likely to increase the populations of cyanobacteria which have been particularly implicated in the nitrogen economy of agricultural soils. However, the impact of inert material, present in the commercial formulation, on the soil algal flora must be clearly understood although it is likely that the carrier, in general, causes no biological effect.

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INDUCTION OF SPORULATION IN *ALTERNARIA PORRI IN VITRO*

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ALTERNARIA PORRI (Ellis) Cif. is world wide in distribution causing purple blotch disease, mainly in onion and garlic. The difficulty in sporulation of *A. porri* on culture media as well as on host under normal conditions has been reported[1–4]. In the present investigation, out of the 5 isolates of *A. porri* isolated from onion (*Allium cepa* L.)[5], none could sporulate on the conventional media.

In the present studies some specific methods suggested by Sproston and Setlow[6] and Srinivasan *et al*[7] for inducing sporulation in various fungi were also employed. None, except Srinivasan *et al*'s[7] method in modified form could induce sporulation in isolate Ap-5 of *A. porri*. In the modified method, leaves of 30-day-old seedlings of *Pennisetum americanum* (L.) Leeke were cut into small bits of one cm, suspended in distilled water and autoclaved at 1.045 kg/cm^2 pressure for 15 min. After absorbing the excess moisture on sterile blotters, 3 leaf pieces were transferred to the surface of sterilized calcium carbonate agar medium (Calcium carbonate, 3 g; agar, 15 g; distilled water 1 l) contained in a petri dish. A 2 mm mycelial disc of each isolate cut out from active growing mycelium of 7-day-old culture of *A. porri* grown at 25 ± 1°C on Czapek's agar were placed on the surface of each piece of the leaf and the plates were incubated at 25 ± 1°C. After 48 h plates were examined daily under the steriobinocular. Sporulation occurred in Ap-5 isolate of *A. porri* after 4 days of incubation on pearl millet leaf bits. The spores obtained by the above method were found pathogenic when spray inoculated on leaf/seed-stalk of onion cv 'Nasik Red'.

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