cases, the infection was noticed only on the upper branches, whereas the lower portion of the plant remained healthy. The diseased spots ultimately turned greyish with black dot-like prominent pycnidia. In advanced cases of infection, needles became yellow and the plants were completely or partially defoliated and finally withered.

Pycnidia were scattered, embedded to erumpent, non-ostiolate, opening by a longitudinal slit at maturity, unicellular but occasionally bilocular and 90–110 X 110–220 μ. Conidia were of two types. Alpha conidia hyaline, one celled, oblong to fusoid, 5–0-10–0 2·5-4·7 μ. Beta conidia hyaline, one celled, filiform, bent, 12·7–17·5 2·5 μ. These were rarely observed in nature and few in number and were produced in the same pycnidia.

This disease was first described by Kheswalla1 from Pusa (Bihaar) and was reported to be caused by Phoma asparagi Sacc. because of the absence of beta spores. These spores have been observed in the present specimen. Hence, the casual organism has been treat as Phomopsis asparagi (Sacc.) Bubak2.

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Indian Institute of H. S. SOHII Horticultural Research, B. A. ULLASA Bangalore, May 9, 1975. S. S. SOKHII


Unsaponified Matter of Asphodelus tenuifolius Fat

Asphodelus tenuifolius1-2, known as ‘Bokat’ in Hindi and belongs to the natural order Liliaceae. Ayurvedic system of medicine described the plant as diuretic and useful for curing ulcers and inflamed parts. In India, it is cultivated widely in Indogangetic plain.

3 kg of dried and powdered plant on extraction with petroleum ether in a Soxhlet extractor and removal of the solvent under reduced pressure yielded 20 g of a brown coloured fat. It was saponified with 0·5 N alcoholic KOH and unsaponifiable matter extracted with solvent ether. The solvent was distilled off and the residue subjected to column chromatography over Brockmann's alumina using (i) petroleum ether : benzene (2 : 1) and (ii) benzene : chloroform (30 : 25) as eluents. The eluate (i) on concentration and crystallisation from a mixture of chloroform : methanol (1 : 1) yielded white flakes, m.p. 199°, [α]D = +78 (CHC1₃). Found: C, 84·37; H, 11·86%, m/e = 426; calculated for C₈₀H₆₈O₂: C, 84·44; H, 11·81%. acetate, m.p. 237°, [α]D = +80 (CHC1₃). It gave positive Liebermann-Burchard reaction and Noller's reaction. Mixed m.p. determination and cochromatography with authentic sample confirmed it as β-amyrin.

The eluate (ii) yielded another colourless compound crystallising from methanol : ethyl acetate (1 : 1), m.p. 136–7°, Found: C, 83·75; H, 12·19%, m/e = 414; calculated for C₉₀H₆₆O₂: C, 84·05; H, 12·07%; acetate, m.p. 127°; benzoate, m.p. 144°. It gave positive Salkowski and Liebermann-Burchard reactions and was identified as β-sitosterol by mixed m.p. and co-chromatography with authentic sample.

Chemical Laboratories, V. K. SAXENA, University of Saugar, Sagar (M.P.), India, and
Department of Chemistry, R. B. SINGH, University of Allahabad, Allahabad (U.P.), India, May 22, 1975.


ANNOUNCEMENTS

Chemistry of Natural Products

The IV Indo-Soviet Symposium on the 'Chemistry of Natural Products' is scheduled to be held from 18th to 23rd of February 1976 at the Central Drug Research Institute, Lucknow. Topics for the Symposium will also include Biopolymers and Pharmacology of Natural Products.

Abstracts of papers for presentation at the Symposium may be sent by the end of November 1975 to the Project Coordinator, Indian National Science Academy, Bhuadur Shah Zafar Marg, New Delhi 110 001 and may be marked 'IV Indo-Soviet Symposium on Chemistry of Natural Products'.