

TABLE I

Effect of kernel age on precursor entry and lipid synthesis in groundnut

Data are the mean of three replications along with SE values; figures within parenthesis are per cent of total entered into the lipid fraction

Incubation period (h)	Entry into plant material (cpm $\times 10^{-3}$ /g fr. wt.)		Incorporation into lipid fraction (cpm $\times 10^{-3}$ /g fr. wt.)	
	Mature	Immature	Mature	Immature
1	147.97 \pm 29.07	407.36 \pm 90.06*	3.02 \pm 0.51 (2.20)	110.19 \pm 13.15** (29.64)
2	145.47 \pm 4.91	817.94 \pm 46.29**	8.39 \pm 1.12 (5.73)	298.33 \pm 11.53** (36.87)
4	191.54 \pm 27.82	839.89 \pm 3.50**	30.68 \pm 14.43 (17.41)	546.55 \pm 71.37** (65.13)

Values differ significantly from mature kernels at *P = 0.05 and **P = 0.01.

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A NEW LEAFSPOT DISEASE OF *THESPESIA POPULNEA* CORR (L.) SOLAND. EX CORR

DURING a routine survey of phytopathogenic fungi the authors encountered a new leafspot disease of *Thespesia populnea* Corr (L.) Soland. ex Corr in the College Campus. The diseased leaves were first collected during August-September, 1977. Since then the authors have observed this disease every year during the same season.



FIG. 1

The disease starts as small pinhead yellow coloured spots on the upper surface of the leaf margin and expanding towards midrib. The main veins are freely traversed and the mature spots appear as irregular light brown necrotic patches with a prominent yellow margin (Fig. 1). Initially the disease is confined to older leaves but later the younger leaves also get infected leading to defoliation.

Isolations from surface-sterilized diseased tissues on potato dextrose agar yielded a Sphaeropsidalean fungus which on critical examination showed to be a species of *Phomopsis*. Pathogenicity of the fungus was proved by artificially inoculating healthy leaves with the isolate. Reisolations from the infected leaves yielded the same fungus.

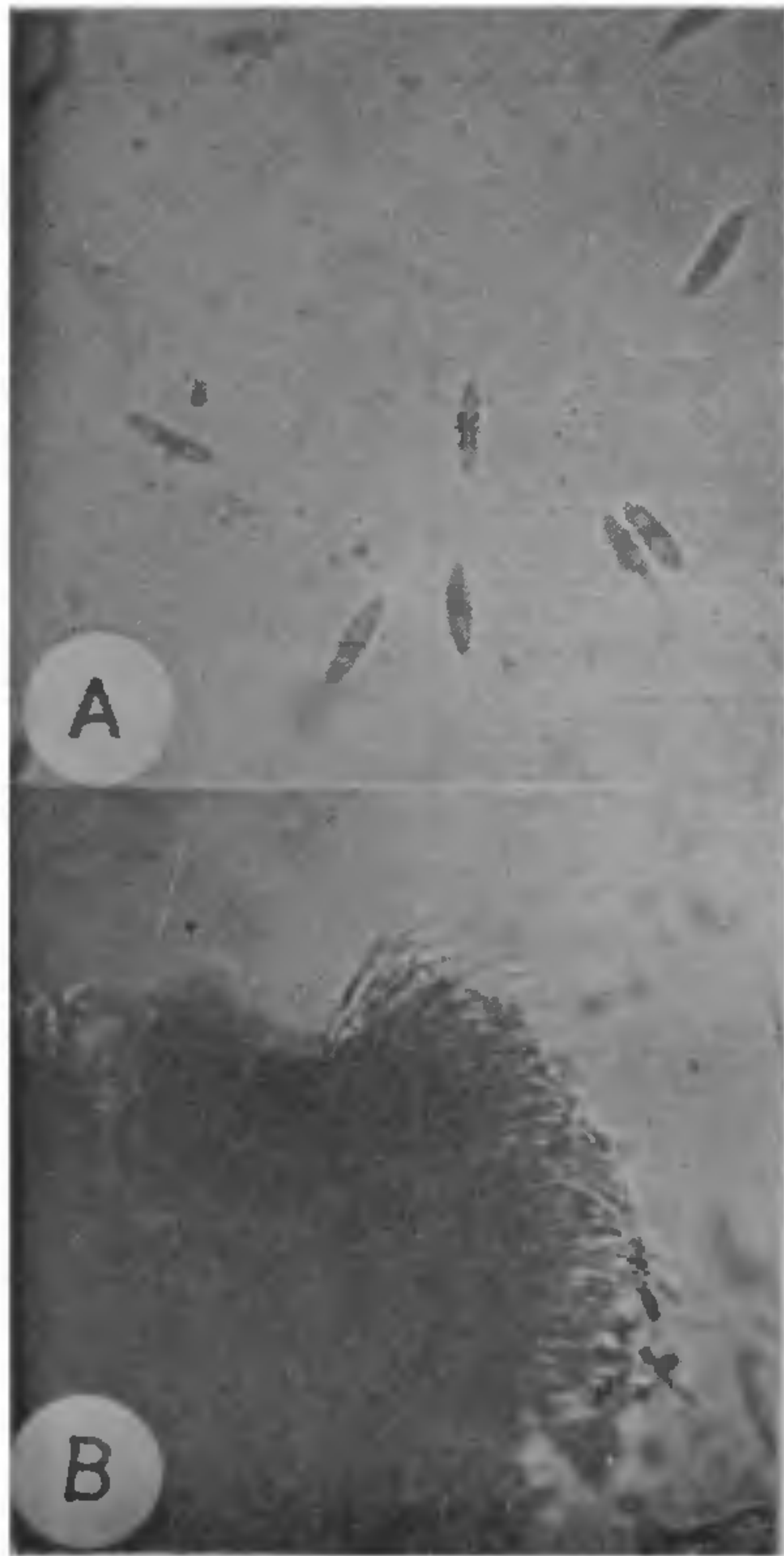


FIG. 2

The white mycelium becomes bright yellow on aging; it is poorly branched and closely septate. The pycnidia are dark, often incomplete, immersed, globose to

depressed or spherical, 2-2.5 mm in diameter having polar droplets. Conidia hyaline, one celled, of two types: α -conidia, fusiform, slightly constricted in mid region, guttulate, $6-7 \mu \times 2-3 \mu$ (Fig. 2 A); β -conidia filiform, mostly curved, $12-20 \mu \times 0.5 \mu$ (Fig. 2 B). On these characters it is identified to be the imperfect state of *Diaporthe eres* Nits¹. Based on the above description the isolate is considered as a new species namely *Phomopsis thespesiae*.

The culture has been deposited at Commonwealth Mycological Institute, Kew, England, under No. I.M.I. 212852 and also at mycological collections, Bangalore University, under No. 31.

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INDUCTION OF FLOWERING AND FRUITING IN IMMATURE MANGO SHOOTS WITH KNO_3

INDUCTION of mango flowering is a commercial practice in the Philippines. An early method called smudging has been carried out by growers for many decades⁷. Gonzales⁶ considered that only mature shoots, about a year old², could be induced to flower and Galang and Agati¹ confirmed that 2.5 to 5.0 months old shoots are unsuitable for induction by smudging. These observations have been adopted as guides for flower induction with a new method—foliar spraying with 10 g/l KNO_3 . Astudillo and Bondad¹ disagreed that only mature shoots will respond to KNO_3 . They showed that KNO_3 -induced flowering of 'Carabao' shoots of 4.5 to 8.5 months of age. This note is a report of flower induction in 1.25 to 4.75 months old shoots.

We limited the experiments to shoots over 1 month old, because, a type of reproductive growth first produces leaves, maintains that apparently vegetative status, then puts up an inflorescence at the terminal or axil. Sen⁸ illustrated this among the various types of panicles but did not indicate relative periods of occurrence. Based on previous work^{1,5,9,10}, natural or induced bud (whether purely vegetative, purely reproductive, or mixed) growth stops in about a month