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INTERACTION BETWEEN MOSAIC VIRUS AND *FUSARIUM OXYSPORIUM*, f. sp. *PISI* (LINE) INFECTING PEA PLANTS (*PISUM SATIVUM* L.)

THE studies on the rhizosphere mycoflora of the plants infected with fungi and bacteria have been done by a number of workers, but similar studies on virus infected plants have received attention only during recent years. These include a number of virus-host combinations such as *Dolichos* sp., infected by dolichos enation mosaic virus¹, in coffee infected by decline disease⁷, *Chenopodium album* infected by tobacco mosaic virus⁵, croton chilli and tomato infected by croton yellow mosaic virus, chilli mosaic virus and tomato mosaic virus respectively⁶, groundnut sB II infected by groundnut rosette virus³. The present paper however, deals with the effect of the virus on the population of *Fusarium* causing wilt in pea plants.

Sterilized and sieved soil was used for raising pea seedlings at the rate of five per pot. At the two leaf stage of the seedlings, the soil of each pot was infested with 10 ml spore suspension of *Fusarium oxysporium*, f. sp. *pisi* in sterilized distilled water and two days later the top leaf of each plant was inoculated with the standard virus extract. The inoculated plants were incubated in the glass house at 25° ± 2° C along with the control in which leaves were rubbed with distilled water. After 20 days of incubation the rhizosphere and rhizoplane were studied following the method of Laxmikumari⁴, and the number of colonies of the fungus per gram oven dry soil were recorded in Table I.

It is evident from Table I that the virus enhances the population of the fungus both in rhizosphere and rhizoplane. R/r ratio of virus infected roots is almost the same as in healthy one. These ratios (R/r, D/H) indicate that fungal growth is proportional in both the cases. These results are in agreement with those reported by Buxton and Perry¹.

Possibly the altered physiological set up of the diseased and healthy plants may account for the differences in exudation and microenvironmental

TABLE I

Number of *Fusarium* colonies (per gram oven dry soil) in rhizosphere and rhizoplane of *Pisum sativum* L. var., *bonneville* infected with the virus

Root	Rhizo- sphere (R)	Rhizo- plane (r)	R/r
Diseased (D)	91.00	54.00	1.68
Healthy (H)	13.00	8.00	1.62
D/H	7:1	6.7:1	1.03:1

conditions of the root region which consequently affects the mycoflora differentially^{2,3,4}. In most of the cases, an enhancement in the fungal population has been reported.

Therefore the variation in colony count may possibly be due to selective and differential assimilation of root exudates.

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NEW RECORD OF ALTERNATE HOST PLANTS OF GROUNDNUT LEAF MINER *STOMOPTERYX SUBSECIVELLA* ZELLER (SYN.: *S. NERTERIA MEYRICK*) (LEPIDOPTERA: GELECHIIDAE)

GROUNDNUT leaf miner *Stomopteryx subsecivella* Zeller has been reported to attack redgram, *Cajanus cajan* Millsp.^{1,2,4}, soybean, *Glycine max* Merr.^{1,4,5}, green gram, *Phaseolus aureus* Roxb.⁶ and a wild leguminous shrub, *Psoralea corylifolia* Linn.¹⁻⁴

During the second week of November, 1974, *S. subsecivella* was observed for the first time mining the leaves of waste land weeds, viz., *Indigofera hirsuta* Linn. (Leguminosae: Papilionaceae) and *Phaseolus calcaratus* Roxb. (Leguminosae: Papilionaceae) and the fodder plant lucerne, *Medicago sativa* Linn. (Leguminosae: Papilionaceae). A large number of leaf miner adults have migrated and oviposited on these