fibres, which were found to be equally mature in technological tests as those from normal plants, is responsible for the finer feel of lint, as reported by Nanjundayya.[1]

The identity of the locus of the present mutation with Cu, is being tested by studying its linkage relationships.

Our thanks are due to Shri M. U. Parmar for technological tests of fibre maturity.

Agri. Res. Station, Surat, *July* 1, 1953. N. R. BHAT. K. D. KHATTAR.

1. Nanjundayya, C., *I.C.C.C. Tech. Bull., Series B*, No. 36. 2. Yu, Chi Pao, *J. Genet.*, 39, 69.

A *TRICHODERMA* DISEASE OF HONEY BEES

SOME dead bees were collected from an apiary near Jorhat in July 1952. The owner complained that all of a sudden the large number of his bees died while the rest had fled away. The dead bees collected were examined with a hand lens which revealed the presence of fungal growth covering the bodies of the dead bees. Such bees when dissected and examined carefully under the microscope showed that the walls of the stomach were riddled with fungal growth and in badly infested ones, the tissues were completely disintegrated.

A large number of isolations was made and a species of *Trichoderma* was always obtained in culture. It was identified as *T. lignorum* (Tode) Harz.

Inoculation experiments were carried out on bees kept in cages with the pure culture of the fungus Spores of the fungus were either mixed with sterile water and then sprayed on the bodies of the bees with an atomizer, or were mixed with their food (dilute sugar solution) and the bees allowed to feed on it. In both cases infection took place and the bees developed a disease and ultimately died.

The first symptoms of infection were weakening, restlessness and continued effort on the part of the bees to escape Later, the affected bees started crawling, lost one or more legs. The first crawlers appeared in 1-3 days depending upon the virulence, rate of growth of the fungus and the quantity of inoculum used. Death occurred within a few hours after the commencement of crawling.

So far, no such disease of honey bees appears to have been reported from any part of India. Fielitz[1] from Germany and Nicolls[2] from Tasmania, however, have reported diseases of bees caused by species of *Trichoderma* and other fungi.

Further studies are in progress and a detailed report will appear elsewhere.

Mycologist, S. CHOWDHURY.
Jorhat, Assam, *July* 13, 1953.

1. Fielitz, H., *Centbl. Bakt.*, 1925-26, 66, 28. 2. Nicolls, H. M., *Tasmania J. Agric.*, 1934, 5, 13.

INHERITANCE OF LOBED LEAF MARGIN IN *MUNG* (*PHASEOLUS AUREUS* L.)

THE *Mung* leaves are trifoliate with long petioles. Generally the leaflets have entire margin, but rarely types with tri-blood leaflets are also met with. In Uttar Pradesh types with lobed leaf-margin are not found at all.

In crosses between a lobed leaf type, 41 D-I, and other types with entire leaf-margin, *viz.*, T I, T 48-6 and T 49-8, the lobed leaf character has been found to be dominant in F_1. In F_2 the results shown in Table I were obtained:

TABLE I

Cross	No. of plants with lobed leaf margin	No. of plants with entire leaf margin	Total No. of plants	Chi-square (3 : 1)	P Value
41D-IXT.1	343	99	442	1·5958	0·20 to 0·30
41D-IX48-6	412	138	550	0·0024	0·95 to 0·98
41D-IX49-8	266	109	375	1·9003	0·20 to 0·30

The above data give a food fit to a 3 : 1 ratio as the chi-square value is not significant. Thus the two characters, *viz.*, lobed *vs.* entire leaf-margin are controlled by one major gene difference.

The above finding is further substantiated by the F_3 data. Out of 21 lobed leaf type F_2 individuals grown in F_3 7 bred true for the lobed leaf type character and the other 14 individuals segregated into lobed and entire leaf-margin plants in a 3 : 1 ratio. Six F_2 individuals with entire leaf-margin were also grown in F_3. All these individuals bred true for the entire leaf-margin character.

From the above data it is concluded that "lobed leaf-margin" is dominant over "entire leaf-margin" with a monogenic difference. The 'entire leaf-margin' is designated by the symbol 'e' and the 'lobed leaf-margin' as 'E'.

Govt. Res. Farm, Kanpur, U.P., *September* 8, 1953. DHARAMPAL SINGH. T. R. MEHTA.