

The results of a statistical analysis conducted on the pot germination figures are set out below.

Treatment.	Mean Percentage Germination.	Significantly Exceeds.	
		5% Level.	1% Level.
A. Copper carbonate	58.6
B. Thiram (50%)	69.3	D, E	D, E
C. Chloranil (98%)	66.2	D, E	E
D. Agrosan	53.8
E. Control	52.0

These results show that the thiram and chloranil dust preparations at a strength of 1 oz. per bushel were extremely effective in preventing mould growth. Agrosan at 2 oz. per bushel was fairly effective, while copper carbonate was of little value.

It is obvious that the mould was having little effect on total germination percentage in testing trays. However, the results of the fungicidal tests would indicate that where a particular preparation was effectively controlling the mould growth, germination percentage in sterile soil was slightly increased.

—G. S. Purss.

A Disease in Williams Hybrid Bananas Produced by *Fusarium* sp.

In August 1950, there appeared in a banana plantation in the Beenleigh district three Williams Hybrid plants showing symptoms similar to those produced by Panama disease in susceptible varieties. As the Williams Hybrid is a sport from the Cavendish, a variety immune to Panama disease, this occurrence was a matter of some interest.

The leaves of the affected plants were dying back from the tips but the typical bright yellow colour was absent. Slight cracks were present in the leaf sheaths at the base of the plants. Dark streaks were visible from the outside of the pseudostem and when examined internally were found to be brown "soggy" areas similar to those commonly associated with Panama disease. Many of the vascular strands in the corm tissue exhibited the reddish-brown colour typical of this disease.

A species of *Fusarium* differing from *F. oxysporum* f. *cubense* (E.F.S.) in the colour produced on rice and P.D.A. media was isolated from the diseased tissue.

In a pathogenicity test this species proved capable of attacking both the Williams Hybrid and Lady Finger varieties. Affected plants became stunted and exhibited the vascular discolouration seen in the field condition. The Cavendish variety was not affected.

F. oxysporum f. *cubense* was included in the pathogenicity trial but produced symptoms only in the Panama-susceptible Lady Finger variety.

The disease in Williams Hybrid has not recurred in the field.

—G. S. Purss.