NOTES

LITTLE LEAF VIRUS ON ACALYPHA WILKESIANA.

N October, 1960, seven plants Acalypha wilkesiana Muell. Arg. were located at the Agricultural Extension Centre, Talliligap, New Britain, showing a marked witches brooming of the branches and severe little leaf condition. Diseased shoots were established in the pathology laboratory at Keravat and graftings made onto disease-free root stocks. Of the ten plants grafted, all developed a severe witches brooming with little leaf symptoms. The symptoms appeared nine weeks after grafting and were persistent. There was no evidence of insect, fungal or bacterial infection and it is considered that a virus is responsible. No transmission was achieved using Bemesia tabaci which were found on the diseased plants, nor mealy bugs. The virus could not be transmitted by mechanical

inoculation and it is considered that the method of transmission in the field is through the use of diseased cuttings taken inadvertantly from a plant which is infected, but not showing marked symptoms. A plant may not show visible signs of infection for several months and then only in a mild form such as vein clearing with a shortening of the internodes.

The symptoms on the diseased plants are a vein clearing of the secondary veins followed by shortening of the internodes giving the branch a typical witches broom appearance. The leaves on the infected shoots are markedly reduced in size (Plate I).

This disease appears to be of no economic importance, but it is the first record of a virus disease of *Acalypha wilkesiana*.

R. J. VAN VELSEN. (Manuscript received 11th April, 1961.)

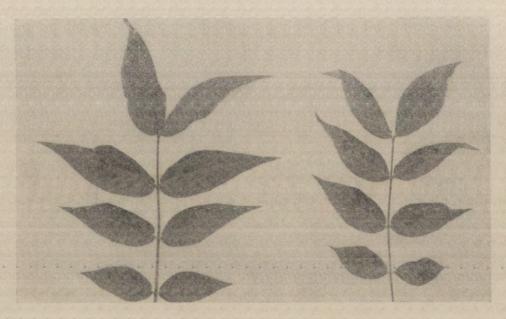


Plate I.—Little leaf virus of Acalypha wilkesiana. (Diseased shoots on right, healthy on left.)

PAPUA AND NEW GUINEA AGRICULTURAL JOURNAL