

* Reprint of the article published in the *Commonwealth Phytopathological News*, Part 1, page 4, January, 1965, from which the illustration was omitted because of short age of space.

A Condition Resembling Ring Spot of Maize in Papua.

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A CONDITION not previously recorded in Papua or New Guinea has been found present on maize leaves collected during February-March, 1964, by a Papuan field assistant, Mr. R. Ora, from a native garden in Papua located in an area of scattered and somewhat isolated hamlets in secondary bush at an altitude of 3,500 feet near Efogi on the south-west flank of the Owen Stanley Ranges. It consists of "marbled" interveinal spots, not very evident unless held to the light, but then distinctly translucent; the smallest spots about 2 mm. in length, but the majority much larger, some even running nearly the whole length of the leaf and forming long translucent strips of tissue, possibly representing the end-to-end confluence of individual spots and strips. Laterally the spots and strips appear to be limited by the veins, and are seldom over 4 mm. wide (*Plate 1*). Necrotic tissue occurs in the older spots, in a few cases repeating the marbled appearance, but in others forming elongated oval areas of necrotic tissue, again mainly bounded by the veins.

The condition appears similar to that from Nigeria described and illustrated by Cammack (*Commonw. phytopath. News* 3 (4) : 61-62, 1957) and Simons (*Ibid* 9 (2) : 29-30, 1963). The marbled, translucent lesions in the Papuan material are unaccompanied by the fine chlorotic spotting noted by Cammack but considered by Simons to be damage caused by maize leaf

aphid. No fungi or bacteria were isolated from the present material and no fungi were detected in the tissues. The condition does not appear to resemble other virus diseases described on maize.



Plate I.—Translucent, "marbled", interveinal spots on maize leaves, as seen by transmitted light.

[Photo D.I.E.S.]