

EVALUATION OF NINE *HEVEA BRASILIENSIS* CLONES FOR MISTLETOE INFESTATION AND THE EFFECT ON LATEX YIELD

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Incidence of mistletoe on nine rubber clones consisting of three exotic (PR 107, RRIM 707 and GT 1) and six clones developed by Rubber Research Institute of Nigeria (Nig 800, Nig 801, Nig 802, Nig 803, Nig 804 and Nig 805) were evaluated. The effect of mistletoe on rubber production was also studied. GT 1 was more susceptible followed by Nig 801 with disease indices of 19.22 and 12.23 per cent respectively. RRIM 707 recorded the lowest disease index (2.37%). There was no correlation between mistletoe infestation and yield in the clone GT 1.

Key words: *Hevea brasiliensis*, Mistletoe infestation, Nigeria.

Para rubber (*Hevea brasiliensis* Muell. Arg.) is prone to several diseases caused by pathogens and parasites under adverse environmental conditions. In Nigeria, mistletoe (Family: Loranthaceae, Genus: *Phragmanthera*) is the only phanerogamic parasite recorded that affects rubber trees (Begho *et al.*, 1998; 2002). They are found on trees from the second year of field establishment. As a result of infestation they cause significant economic damage to the host plants (Overfield *et al.*, 1998; Begho *et al.*, 2002). This paper evaluates the susceptibility of nine rubber clones to mistletoe infestation and its possible effects on latex yield of clone GT 1.

The experiment was conducted in the rubber clone garden of the Rubber Research Institute of Nigeria (RRIN) planted in 1991 and opened for tapping in 1998. Nine rub-

ber clones (Nig 800, Nig 801, Nig 802, Nig 803, Nig 804, Nig 805, PR 107, RRIM 707 and GT 1) planted in a randomized complete block design was used for the study. Each clone was replicated four times with 21 rows each of 22 trees per experimental unit. The plant spacing was 3.34 x 6.7 m.

Eighty four trees (4 trees x 21 rows) were randomly evaluated per block for mistletoe infestation. Assessments of infestation were done by using the disease score-rating chart from which infestation indices were calculated according to Pray (1990) and Ogbebor and Adekunle (2005). The ratings were 0 = no infestation, 1 = mild infestation (1-5 infestation spots), 2 = moderate infestation (5-10 infestation spots) and 3 = severe infestation (10 and above infestation spots). The percentage infestation index was worked out using the formula,