

EFFECTS OF IR34 ON GREEN LEAFHOPPER, *NEPHOTETTIX*
VIRESCENS (DISTANT) AND ITS RICE TUNGRO
VIRUS TRANSMISSION

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ABSTRACT

ROGELIO C. CABUNAGAN, University of the Philippines at Los Baños, Philippines, June 1981. Effects of IR34 on Green Leafhopper, *Nephotettix virescens* (Distant) and its Rice Tungro Virus Transmission. Major Professor: Dr. K. C. Ling.

This study was designed to determine the effects of IR34 resistance on the green leafhopper (*Nephotettix virescens*) and its rice tungro virus transmission. Studies were conducted on (1) nymph survival, number of adults produced by 3 pairs, and adult longevity of green leafhopper reared continuously for 5 generations on IR34 and (2) the rice tungro virus transmission by green leafhopper reared continuously for 5 generations on IR34.

Rearing of green leafhopper on the resistant variety IR34 for 5 generations resulted to a progressive increase in the survival of nymphs, number of adults produced by 3 pairs, and adult longevity. Consequently, the rice tungro virus transmission on IR34 also improved.

Although there was an improvement in the overall performance of the colony continuously reared on IR34, the performance on IR34 was still not comparable to that on susceptible TN1 variety. This indicate that 5 generations of continuous rearing was not enough for the colony to survive, reproduce, and transmit the rice tungro virus effectively on the resistant variety. However, it is clearly

shown that the IR34 reared insects were different from those maintained on TN1 and could be considered as a distinct strain of green leafhopper.