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Author

Azad, P.

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P. Azad

ABSTRACT. Fruit from healthy and acid limes of two varieties, Kagji and Goal Nemu, infected with citrus corky vein virus were counted and weighed. Significant losses in both number and weight for both varieties were recorded. Infected Kagji trees yielded 51.3% less fruit than healthy trees, with a weight loss of 60.4%, while Goal Nemu produced 60.4% less fruit weighing 89.7% less than the fruit from healthy trees.

Citrus yellow corky vein virus (CYCVV) was first reported as a new graft transmissible agent of Sathgudi sweet orange from Andhra Pradesh in 1974 (1), and has subsequently been found in acid lime (2). The virus is both graft and mechanically transmissible (1,3), but not apparently seed or pollen transmitted. Insect transmission is possible but not tested. Because infected acid lime trees in Assam appeared to produce less and smaller fruit than healthy, a study was conducted to quantify this observation.

Two varieties of acid lime, Kagji and Goal Nemu were found to be infected with CYCVV near Tezpur in the Sonitpur District of Assam. During July and August fruit from 30 apparantly healthy and 30 infected trees from both the varieties harvested thrice, counted and weighed.

Tristeza and Greening symptoms in the orchard were not found apparently which could cause losses in number and weight of the fruits. The average numbers of fruit and their weight totals per tree are recorded in Table 1. Infected Kagji lime trees yielded 51.3% less fruit than the same number of healthy trees, while infected Goal Nemu trees produced 60.4% and 89.7% in Kagji and Goal Nemu respectively. These large yield losses indicate that CYCVV is a potentially serious virus, and more research on it and its means of transmission are urgently required.

TABLE 1
EFFECT OF CITRUS YELLOW CORKY
VEIN VIRUS ON THE YIELD OF TWO
ACID LIME VARIETIES

| | o. fruit/tree reduction) | Fruit weight (kg/tree) (% reduction) |
|--------------------|-----------------------------|--|
| Healthy Kagji | 28.00 | 5.40 |
| Infected Kagji | 13.65(51.3) | * 2.14(60.4)* |
| Healthy Goal Nemu | | 4.50 |
| Infected Goal Nemu | 18.35(60.4) | * 0.46(89.7)* |

^{*}Statistical analysis indicates that data on percentage of reduction in number and weight of acid lime varieties (Kagji and Goal Nemu) are significant at the 1% level.

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