

2. Stalk Glucose Content and Incidence of Insect Attack.

Differential attack of the shoot and leaf worm *Laphygma frugiperda* on several propagation plots of improved varieties and hybrids, lead to a test of whether there was any association between stalk sugar content, expressed only as glucose, and incidence of attack.

Two composite samples made up by picking several plants at random within each variety, were analyzed for glucose, and the results expressed in percentage on the basis of dry weight. These are shown below:

| <u>Variety</u> | | <u>Percentage of glucose</u> | <u>Score for insect attack</u> |
|-----------------------|-----|------------------------------|--------------------------------|
| Hybrid LM N° 2 | (1) | 2.60 | 4 (highest attack) |
| | (2) | 3.25 | 4 |
| Harland SNA Synthetic | (1) | 4.20 | 1 (lowest attack) |
| | (2) | 3.60 | 1 |
| Seleccion Limoncarro | (1) | 1.46 | 1 |
| | (2) | 4.07 | 1 |

There was apparently no association between stalk glucose content and incidence of insect attack. It was observed, rather, a higher visual association between height of plants and incidence of attack, in which the lower plants suffered a higher insect attack.

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