Simulated insect damage to soybean leaves

L.W. Banks

Department of Agriculture, Condobolin N.S.W. 2877

Soybeans suffer leaf damage throughout the growing season from foliage feeding insects such as budworms *(ileliothis* spp.), soybean moth *(Stomopteryx simplexella),* grasshoppers and many others. The ability of a soybean crop to recover from such damage depends on the level and time of damage. An experiment was sown in 1982 and 1983 at Condobolin in central western N.S.W. to measure the ability of the indeterminate soybean variety, Chaffey, to recover from severe defoliation.

Methods

Field plots were subjected to 50% or 100% mechanical defoliation at four times:

A - first trifoliate leaf fully expanded
B - first flower open
C - all plants flowering
D - all plants finished flowering

Each plot was treated once only and allowed to recover without further damage to simulate single insect attacks. Control plots were left undamaged.

Results and Discussion

Undamaged plots produced a leaf area index (L.A.I.) of 5.91, 31 branches/m^2, 2771 kg seed/ha and a seed weight of 24.6 g/100 seeds, averaged over the two years.