

CONTINUING STUDIES ON THE CORN EARWORM

M. Akkawi, S. White and D. Scott

Département of Entomology, University of Idaho, Moscow 83843

Effect of Parental Age and Crowding on Progeny

With single pairs, significantly reduced egg production and increased duration of egg and larval stages occurred with increased parental age, but no effects on hatching and pupation were observed. These differences were more pronounced with progeny from diapaused females than with progeny from non-diapaused females.

Progeny from 2, 4 and 8 pairs of adults caged together did not exhibit the same results.

Plant Compensation for Damage

Kernels from damaged ears weighed more, had a higher protein content and exhibited changed amino acid content when compared with kernels from undamaged ears. The effects of damage varied, especially with amount and time of damage. Kernels from ears damaged before milk stage exhibited the most increase, while kernels from ears damaged later may show decreased weight, protein content and amino acids. Corn earworm damage to the ear also affected emergence of plants grown from the seed; resulting in delayed emergence from the kernels immediately adjacent to the damage, and earlier emergence from seeds from the middle of the ear. Plant emergence was also influenced by the amount of damage as well as by the phenological age of the ear when the damage occurred.