P.05 - Influence of nitrogen on oviposition of Pieris brassicae L. on cabbage

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Cabbage variants (Brassica oleracea var.capitata f.alba), were grown under different levels of nitrogen supply (control, N-100 kg/ha and N-200 kg/ha) and tested for the oviposition preference of Large White (Pieris brassicae L.). The fertilizer used was Carbamid (46.2 kgN). N-100 variant was fertilized once and N-200 twice. Butterflies laid more than three times as many eggs on N-200 plants as on the control plants. No significant difference was found between the number of eggs laid on N-100 plants and on the control plants. The oviposition activity of P. brasicae was low both on control and N-100 variants during the whole period of experiments. It appeared that in our experiment the more fertilized variant was, for butterflies, the most suitable host plant. Knowledge of P. brassicae susceptibility, in regard to the cabbage plant, will enable producers to employ the most appropriate control tactics for a particular cultivar. Furthermore, our results underline the importance of applying fertilizer at the optimal rate to produce a cabbage yield that is not compromised by attacks of the P. brassicae and other pests.