

TOWARDS SUSTAINABLE CONTROL OF PEST INSECTS -REDUCTION OF PESTICIDE USE

C. Rikard Unelius¹

*¹⁾ Ecological Chemistry, Department of Chemistry, Linnaeus University,
Kalmar, Sweden*

Abstract

The use of pesticides in agriculture and food production can be replaced or at least reduced by use of integrated pest management (IPM) in combination by control methods that use the pest insects own chemical communication signals.

Examples from the applied side will be given, e.g. the substitution of the pyrethroid permethrin by Conniflex for pine weevil damage control, monitoring of mealy bugs in vineyards in NZ, mass trapping vs mating disruption of the pea moth and success in applied IPM of the wine moth.

Keywords: Pesticide reduction, sustainable control, pest insects, pheromones, semiochemicals