

As part of a programme for controlling lepidopteran stem-borers in cereal crops in Africa, we have investigated the effectiveness of combined cropping regimes of cultivated and wild plants for reducing stem-borer damage. Intercropping with the non-host molasses grass, *Melinis minutiflora*, significantly decreased levels of infestation by stem-borers in the main crop and also increased larval parasitism of stem-borers by *Cotesia sesamiae*. Volatile agents produced by *M. minutiflora* repelled female stem-borers and attracted foraging female *C. sesamiae*. One of the volatile components released by intact *M. minutiflora* which attract parasitoids is also produced by herbivore-damaged plants and is implicated more widely as a cue for stimulating predation and parasitism.