

## Abstract

The Asian pupal parasitoid, *Xanthopimpla stemmator* Thunberg, was imported into East Africa as a classical biological agent of lepidopteran cereal stem borers. Preference of *X. stemmator* females for four common borers of maize and sorghum; the crambid *Chilo partellus* (Swinhoe), the pyralid, *Eldana saccharina* Walker, and the noctuids, *Busseola fusca* Fuller and *Sesamia calamistis* Hampson, was investigated. Pre-adult experience of *X. stemmator* females did not influence choice of host. In dual choice tests, more *B. fusca* were attacked than *E. saccharina*, while *E. saccharina* were attacked more than *Ch. partellus*. Life table studies on three of the hosts revealed that the intrinsic rate of increase was highest when *X. stemmator* was reared on *S. calamistis*. Net reproductive rates, mean generation times and doubling times were not different between hosts. Results suggest that *X. stemmator* can be successfully reared on the three stem borer species and released in areas where any combination of the three hosts occurs.