A locally available anthocorid predator, *Orius albidipennis* Reuter, was evaluated as a candidate biocontrol agent for *Megalurothrips sjostedti* Trybom, a major pest of French beans, *Phaseolus vulgaris* (L), in Kenya. The functional response of adult *O. albidipennis* to larval and adult *M. sjostedti* was studied at 15, 25, and 28 °C and densities of 5, 10, 20, and 30 larval and adult *M. sjostedti* per cage, over 24 h. More larvae and adult *M. sjostedti* were killed at the higher densities and with an increase in temperature. The data provided good fit to both type I and II functional response models. Attack rates increased with temperature for both the second instar larva and adult *M. sjostedti*. Handling times for the larvae decreased with an increase in temperature while those for the adults increased with increase in temperature. The implications of these results are discussed.