Response of the egg parasitoid *Trissolcus semistriatus* (Nees) (Hymenoptera: Scelionidae) females to chemical cues from eggs of the sunn pest *Eurygaster integriceps* Puton (Scutelleridae) and hairy shield bug *Dolycoris baccarum* L., wheat sting bug *Aelia rostrata* Boh., red cabbage bug *Eurydema ornatum* L. and red-black shield bug *Graphosoma lineatum* L. (Pentatomidae) was investigated under laboratory conditions. Studies were carried out to determine first reaction, residential time and linear speed of the parasitoid, using Y-tube and five armed olfactometers. In Y-tube olfactometer experiments, *T. semistriatus* showed the highest response (86.7%) against the odor of sunn pest, followed by (80%) for hairy shield bug and red-black Shield bug. The parasitoid showed the lowest response (60 %) against the odor of red cabbage bug. Residential time of *T. semistriatus* was determined as 78.84, 75.18, 74.75, 67.65 and 58.55m for sunn pest, hairy shield bug, wheat sting bug, red-black shield bug and red cabbage bug, respectively. Linear speed was significant, lower (3.80) in egg odors of sunn pest than other egg odors. Linear speed of the red cabbage bug, hairy shield bug, red-black shield bug and wheat sting bug was determined as 6.20, 4.80, 4.40 and 4.00, respectively. Statistical analysis showed significant differences as residential time in the plants were also determined. The parasitoid was attracted mostly by sunn pest, hairy shield bug and wheat sting bug, less attraction occurred by red cabbage bug.