Strawberry is an intensive cultivated high value crop that requires large inputs of insecticides. A series of experiments were carried out to demonstrate that commercial production with minimal use of insecticides through the use of biological control as part of an integrated pest management is feasible. The feeding behavior of different generalist predators were studied under laboratory conditions at the Protected Agriculture Project Biological Control Laboratory in Gainesville, Florida. Three predators, the lady beetle, Coleomegilla maculata fuscilabris DeGeer (Coleoptera: Coccinellidae), the big-eyed bug, Geocoris punctipes (Say) (Hemiptera: Lygaeidae), and the minute pirate bug, Orius insidiosus L. (Hemiptera: Anthocoridae) were evaluated as potential biological control agents against some strawberry greenhouse pests. These pests include the cotton aphid, Aphis gossypii Glover, and the two-spotted spider mite, Tetranychus urticae Kotch. All beneficials were provided by a local commercial beneficial supplier, Entomos LLC. Pests were reared at our facility under controlled conditions. A series of experiments that included feeding, effectiveness, and predator:prey ratio studies were carried out for each predator instar and prey. Among the three predators, Coleomegilla 3rd and 4th instar larvae, are the most effective against aphids and mites. They consume the greatest number of prey in the shortest period of time. Ongoing and future research will determine the effectiveness of these predators to control pests on strawberries grown commercially in greenhouses and open fields.