

Small Hive Beetle

Know things about Small Hive Beetle (SHB)

1. Small Hive Beetle (SHB) was first found in the US in 1996.
2. SHB pupate in the soil around Honey Bee hives.
3. The SHB will feed and reproduce on fruit.
4. They are dependent on Honey Bee hives for their primary home.
5. At dusk, the adult SHB is attracted to Honey Bee hives.
6. Once inside the hive the SHB finds a corner to hide in.
7. The Honey Bee stands guard around the SHB.
8. When the SHB is hungry it will rub the mandibles of the Honey Bee.
9. The Honey Bee regurgitate and the SHB feed off of this food.
10. The female SHB will sneak away from the confinement and lay up to 1000 eggs in the bee bread and larvae.
11. It takes three days for the SHB to hatch.
12. The SHB larvae is hungry and loves bee bread.
13. The SHB will normally feed on the Honey Bee larvae for about thirteen to fourteen days.
14. Once feed the SHB larvae leaves the hive at night.
15. They are looking for soil with high moisture content.
16. They will travel about three feet from the hive.
17. The SHB will bury themselves about four inches in the soil.
18. In about three to four weeks they will emerge and the cycle starts over.
19. Strong healthy hive will survive the SHB.

Unknown things about SHB

1. How far do they fly?
2. What is the ph of the soil?
3. How do the Honey Bees force the SHB into a corner?
4. We don't know about the feeding of SHB by the Honey Bee?
5. Does SHB give anything to the Honey Bee?
6. The SHB has been present when the hive collapses. But the cause is unknown.

Characteristic pattern of SHB and the Honey Bee hive.

1. Adult beetle invasion into the colony.
2. Population buildup of adult beetles.
3. Reproduction of adult beetles
4. Significant damage to brood, pollen, and honey stores by beetle larvae.
5. Exodus of larvae from the colony.
6. Beetle pupation in the soil.
7. Beetle emergence as adults and subsequent reinfestation of colonies.

Other effects of SHB.

1. Fermentation of hive products due to the large amount of yeast given off by the SHB.
2. High concentration of SHB could cause the Honey Bee hive to abscond. The SHB will be >1000 in a hive.
3. The SHB carries pathogens. The body of the SHB is covered with hairs. The pathogens are found in the hairs.
4. If commercial operation the hives should be removed from production.
5. Infected SHB could attract other types of beetles to the hive.

Hive losses to SHB is less than 1% of all hive losses in the US. The highest concentration is the southeast where the weather and soil conditions favor the SHB.

SHB control

1. Keep the hive clean
2. Extract the honey as soon as possible
3. Work at keeping the hive healthy.