

# **SBA MODULE 6 Syllabus** Issue 2014

## **HONEYBEE BEHAVIOUR**

The Candidate shall be able to give a detailed account of:-

- 6.1 the function and behaviour of the worker honeybee throughout its life including the types of work done, duration of work periods under normal circumstances and the variations in behaviour due to seasonal changes in the state of the colony;
- 6.2 the mating behaviour of the honeybee queen and drone including an account of the pheromones involved and the concept of drone congregation areas;
- 6.3 the queen honeybee's egg laying behaviour and its relationship to changing circumstances in the hive and external factors relating to climate and season;
- 6.4 the seasonal variations in the population size of a honeybee colony and an explanation of such variations;
- 6.5 the social organisation of the honeybee colony including worker policing;
- 6.6 the methods of communication used by the honeybee including food sharing (trophallaxis), dancing, scenting and vibration;
- 6.7 the behaviour of the foraging bee and its work methods in the field including orientation;
- 6.8 the behaviour of the worker bee towards intruders and the theories advanced to describe the means by which colonies recognise intruders;
- 6.9 the collection of nectar and water and their use by the colony;
- 6.10 the inter-relationship of nectar, honey and water in the honeybee colony;
- 6.11 the conversion of nectar to honey including the hydrolysis of sucrose, the evaporation of water, and the role of the honeybee in accomplishing these changes;
- 6.12 the collection, storage and use of pollen by the honeybee colony;
- 6.13 the collection and use of propolis by the honeybee colony;
- 6.14 the conditions leading to swarming;
- 6.15 the conditions leading to supersedure;
- 6.16 the behaviour of swarms and the method of selection by the swarm of a site for a new home;
- 6.17 the initiation of comb building and the construction of comb;
- 6.18 the colony in winter and summer with special reference to ventilation, humidity and temperature control (homeostasis);
- 6.19 laying workers and drone laying queens and the conditions leading to their development;
- 6.20 the effects of pathogens, parasites and pests on bee behaviour;
- 6.21 the learning behaviour of honeybees;