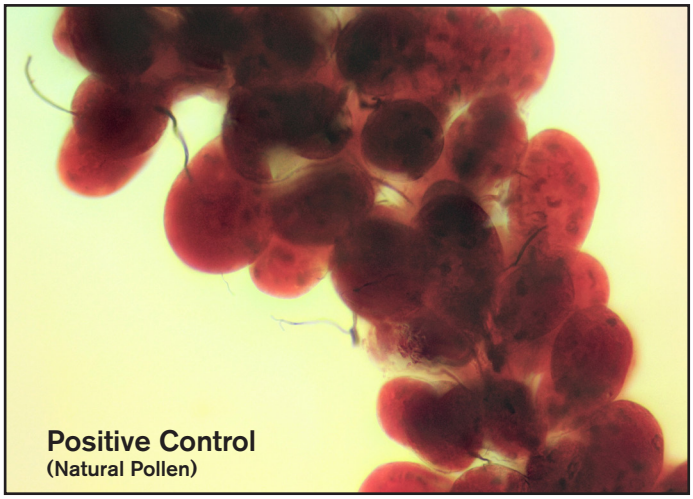
Power Feed™

Hypopharyngeal Gland Development Study



The Hypopharyngeal Gland and its Importance

The HPG (hypopharyngeal gland) is positioned inside the head of all bees. It produces and secretes royal jelly which is then feed to larvae as their sole source of nutrition. The development of the gland is crucial for successful hive growth and brood rearing. The gland is a long string like tubule which terminates at the mouth of the bees. The ducts length is covered with balls called ancinus. Well-developed ancinus are plump and round and secrete large volumes of royal jelly. The extent of the hypopharyngeal gland is determined by the quality of the diet that the bee feeds on such as pollen quality. The HPG becomes fully developed during the nursing stage of a bee's life. This typically lasts less than 2 weeks and maximum development is at around day 8. The size then reduces as they move into foraging roles within the hive. Tests showing inflated or overly long development periods are unrealistic and not representative of bee physiology within a beehive.

The Study

We wanted to understand how **VitaHive™ Power Feed™ influenced HPG development against other leading pollen supplements and natural pollen sources.** Our study lasted over the typical development period of the gland, ensuring the results showed an accurate representation of its developmental. This is important as research studies showing an extended or overly long development periods are unrealistic and not representative of bee physiology within a beehive.

The Result

After examining the Hypopharyngeal Gland of the bees in our study, **VitaHive™ Power Feed™** was observed to be the best supplementary source of protein to feed a hive. The ancinus are noticeably larger, more plump and will therefore produce more royal jelly.

VITAHIVE™

SCIENCE BASED NUTRITION

*View more research online at **www.vitahive.co.nz***