

This module was prepared for members of the New Westminster Beekeeper's Association and are intended to be augmented by hands-on experience in the bee yard.

Bee Pollen

Bee Pollen is plant pollen + nectar + enzymes from a worker bee's head:



Figure 1: Plant Pollen



Figure 2: Plant Nectar



Figure 3: Honeybee Mouth Parts



Figure 4: Bee Pollen

Bee Pollen is a highly nutritious protein food consumed by worker bees to manufacture royal jelly, to build muscle and strengthen their exoskeleton, and to produce venom.

Humans use bee pollen as a nutritional supplement, recognized by Health Canada.

Collecting Bee Pollen

Beekeeper's collect pollen using a pollen trap consisting of obstacles to knock the pollen off the bee's legs as they enter the beehive.

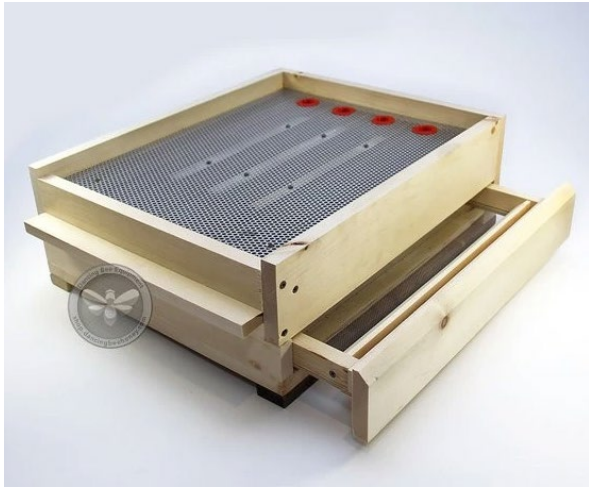


Figure 5: Bottom Pollen Trap



Figure 6: Entrance Pollen Trap

Bee Pollen Collecting Tips:

1. Collect only during the honey flow to not deprive the colony of nutrition,
2. Collect for only 3 days at a time and freeze pollen immediately,
3. Seal off all other openings to the hive because bees do not like walking through a pollen trap.

Propolis

Propolis is plant resin, beeswax, and enzymes from a worker bee's head. Plant resin is gathered and transported by worker bees in much the same manner as bee pollen:



Figure 7: Honeybee Carrying Plant Resin

Honeybees use propolis to seal the hive off from wind and rain and to protect the hive from disease by coating brood cells before the queen lays eggs and by encasing dead mice and other intruders that cannot be removed.



Figure 8: Propolis at the Hive Entrance



Figure 9: Propolis Encased Mouse

People use propolis mostly in tincture form to prevent or treat a cold or influenza. Propolis is also used in healing salves to prevent or treat wound infection:



Collecting Propolis

Three ways to collect propolis:

1. Scraping unoccupied frames and boxes during winter tasks,
2. Collect at hive entrance and top bars from live hives during the summer season,
3. Using a propolis trap during the honey flow



Figure 8: Collecting Propolis from a Live Beehive



Figure 9: Propolis Trap Made from Construction Cloth



Figure 10: Plastic Propolis Trap

Storing propolis for future processing:

1. Hive scappings – freeze the day it is collected,
2. Propolis Mats – collect when 2/3 full (2-3 times from May to August) and freeze.

End.