

POLLEN SUPPLEMENT AND SUBSTITUTE

Pollen is the principal source of proteins, vitamins, lipids and minerals for honey bees. Feeding pollen supplement or substitutes is one of the best beekeeping practices to encourage colony growth. A pollen substitute is any material that can be fed to colonies to replace its need for natural pollen. A pollen supplement is a pollen substitute that contains about 10 % natural pollen (dry weight basis). A pollen supplement can best be described as a pollen extender. Among the most commonly used protein sources are soybean meal, brewer's yeast, low-lactose whey (dried) and Torula yeast. Pollen substitutes and extenders can be fed in a moist patty, or dry. If fed in a patty, it should be placed as close as possible to the combs containing unsealed brood. Dry materials can be fed in a feed-lot system but this requires protection from adverse weather conditions and good foraging conditions.

There are numerous recipes for both pollen substitutes and pollen supplements. The following recipes (modified from The Encyclopedia of Beekeeping, 1985) are a sample and are given in parts by weight, for dry mixes and moist patties, as appropriate.

Pollen Supplement

Recipe #1

soybean flower:pollen (3:1)

sucrose:water (2:1)

Recipe #2

brewers yeast:pollen (2:1)

sucrose:water (6:1)

Pollen Substitute

Dry Mix Parts

2 brewers yeast or soybean flower

3 sucrose

Moist Mix Parts

3 brewers yeast or soybean flower

3 sucrose

2.5 water

