

# SBA Technical Data Sheet Number 09

## Pollen Substitute

### Equipment

Mixing bowl

Weighing scales

Mixing spatula, knife or fork

Plastic containers

### Consumables

Soya flour

Dried brewer's yeast

Dried skimmed milk

Stiff paper

Vegetable oil

Heavy syrup ([see Data Sheet 1](#))

Liquid honey

### Method of Preparation

Technically speaking, a pollen substitute is a material which can serve as a direct substitute for natural pollen sources.

The dry mix consists of the following:

- Soybean Flour, 3 parts by weight
- Dried Brewer's Yeast, 1 part by weight
- Dry skimmed Milk, 1 part by weight

Mix the dry ingredients thoroughly, then add sugar syrup or honey in the proportion of one quart of liquid to every pound of the dry mixture.

In practice this quantity will be found adequate for a considerable number of hives, and the small-scale beekeeper should aim initially to make about half a pound of the dry mixture, and experiment to see how far this goes with their hives. The use of liquid honey rather than sugar syrup will result in a mixture which is probably rather

more attractive to the bees.

A simpler - and probably adequate - mixture can be made using just soya flour, omitting the yeast and milk powder. In practice, this can be mixed with sufficient liquid honey or syrup to make a stiff paste, just stiff enough so as not to flow under its own weight.

The mixture should be formed into approximately four-ounce patties on sheets of stiff paper, (which have been coated with vegetable oil), spread out to a thickness of about a quarter of an inch. If the upper surface of each patty is smeared with a little vegetable oil, they can be stacked for convenience to take them to the apiary without them sticking together too much.

### **Method of Application**

The patties are normally placed directly over the top of the frames of bees, in direct contact with the brood frame top bars. It is not necessary to remove the paper separator sheets. They should be left in place to prevent the upper surface of the patty from drying out. Pollen substitutes are best not used in conjunction with supers, as the bees may try to store the pollen substitute material in the supers.

Pollen substitutes are often fed in autumn or early spring, or at any time when there is an apparent shortage of natural pollen - for example if a normal floral source has failed in a particular area for any reason.

### **Shelf Life**

The moist mixture should be sealed into plastic containers if not required immediately, and refrigerated. Will keep in the fridge adequately for two weeks; if to be stored for longer the material should be deep frozen, and thawed for 24 hours to room temperature before giving to the bees.

### **Health and Safety Information**

No risks or hazards have been identified other than those arising from the preparation of syrup feeds.

**DISCLAIMER:** - Great care has been taken in the preparation of this technical sheet to ensure accuracy but the Scottish Beekeepers' Association cannot accept liability or responsibility. Beekeepers must therefore use the information at their own discretion and risk.

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