

HONEYBEE PRODUCTS AND FORAGE

The Candidate shall be able to give detailed accounts of:-

- 2.1 the main requirements of the current United Kingdom statutory regulations affecting the handling, preparation for sale, hygiene, composition, labelling and weight of packs of honey;
- 2.2 the methods used to uncap honeycombs, and of separating the cappings from honey;
- 2.3 the types of honey extractor available and their use in the extraction of honey including ling heather honey from combs;
- 2.4 the straining and settling of honey after extraction;
- 2.5 the storage of honey including the underlying principles of storage;
- 2.6 the preparation and bottling of liquid honey, including ling heather honey;
- 2.7 the preparation and bottling of naturally granulated, soft set and seeded honey;
- 2.8 the preparation of section, cut-comb and chunk honey for sale;
- 2.9 the constituents expressed in percentage terms of a typical sample of United Kingdom honey and an outline of the normal range of variation of its main constituents;
- 2.10 methods of determining the moisture content of honey;
- 2.11 the spoilage of honey particularly by fermentation (including the effect of water content, storage temperature and the presence of yeast);
- 2.12 the physical properties of honey including relative density (specific gravity), refractive index, viscosity, hygroscopicity, reaction to heat and electrical conductivity;
- 2.13 the main constituents and physical properties of beeswax;
- 2.14 methods of recovering saleable beeswax from used comb and cappings;
- 2.15 the range of uses for, and preparation of, beeswax;
- 2.16 the uses of other bee products such as pollen, royal jelly, venom and propolis;
- 2.17 the preparation of comb honey, soft set, naturally set and liquid honey, beeswax blocks, beeswax candles and meads for the show bench.

The Candidate shall also be able to give:-

- 2.18 a list of 10 major nectar and/or pollen producing plants of the United Kingdom and their flowering periods together with a detailed knowledge of those in his/her own locality;
- 2.19 an account of the importance of nectary guides to the foraging bee using a named example and describe how the following flowers, having been successfully pollinated, can indicate to bees that their visits are no longer required – clover, forget-me-not, horse chestnut.
- 2.20 an illustrated description of the floral structure of apple;
- 2.21 an account of the processes of pollination and fertilisation;
- 2.22 the genetic and evolutionary importance of cross-pollination and an outline of the methods used by plants to favour cross-pollination;
- 2.23 the location and function of the extra-floral nectaries of broad bean, cherry laurel, cherry and plum;
- 2.24 a list of floral sources of unpalatable honey;
- 2.25 an account of the composition of nectar and its variants;
- 2.26 an account of the factors affecting nectar secretion and the variations in the composition of nectar in different plant species and differing weather conditions;
- 2.27 an account of the origins and typical composition of honeydew with a brief description of the characteristics of honeydew honey;
- 2.28 an account of how the worker honeybees process nectar to change it into honey, including the enzymes and chemistry involved (to include a chemical equation).

2.29 an outline account of the determination of the floral source(s) and geographic origin of honey by analysis of its pollen content and the use of such information in the enforcement of regulations governing the labelling of honey offered for sale