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TITLE: New concepts in comb honey.

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Bee Products



New concepts in comb honey

Without doubt the best table honey is comb honey, which is served as the bees prepacked it, in hermetically sealed minicapsules—the cells of the comb. Since the last century the typical container for comb honey has been the pound (or $\frac{1}{2}$ kg) 'section' made of limewood, or some other fine-grained wood that can be cut nearly through and then bent through a right angle to make the four corners.

These sections have several drawbacks:

(a) in use, under less than perfect conditions it may be difficult to get bees to fill them into the corners;

(b) the sections can become marked in a way that looks unhygienic, even if it is not—for instance if bees attach propolis to them;

(c) section honey is very fragile, and damage by breakage in the course of handling has been so high that some stores refuse to stock it;

(d) if comb foundation is used in the sections, and the honey is scraped off it from either side in turn, much honey leaks out from the broken cells, leaving a large surface area of liquid honey.

Efforts to resolve these difficulties have led to the sale of cut-comb honey—which eliminates (a) and (b)—and of chunk honey (a piece of cut-comb honey in a glass jar of non-granulating liquid honey). This latter eliminates also (c) and (d), but introduces another problem—what to do if the liquid honey does granulate, making the whole unsightly.

One of the most satisfactory applications of plastics to the beekeeping industry has been in making sections for bees to fill, and for beekeepers to sell full of honey. Plastic sections do not suffer from drawback (b), because plastic can be cleaned satisfactorily, and most of them provide a safe packaging box, overcoming (c). Drawback (a) has been overcome by the use of round sections, and these have been on sale in the USA for several years. They are often referred to generically as cobanas, from the name of an early manufacturer. So, in June 1980 American Bee Journal a special 'cobana sale' is advertised by The Happy Hive. A slightly different pattern is sold as Ross Rounds. The round sections consist of the two halves of a plastic circular surround, which clamp a piece of thin foundation between them, and plastic friction-fit covers, clear for one side and opaque for the other. They are 10.3 cm in diameter.

An Austrian product, sold by Hafelder Kunststoffwerk as comb honey cassettes, now removes drawback (d), by providing for single-sided sections. The unit is a rectangular polythene tray $(12\cdot4\times10\cdot5~{\rm cm})$ whose base is impressed with a pattern of worker cells and then coated with beeswax. Tiny protruding pins and corresponding holes at the corners enable these units to be attached in pairs either back to back, making the equivalent of a traditional wooden section, or with open sides face to face, making a sealed package for marketing. For table use, the two are separated, and each forms a shallow dish with one layer of cells attached to the base.

It seems likely that some manufacturer will combine the benefits of all types and make plastic units, single-sided like the cassettes, but round instead of rectangular.

J. A. Hogg, in American Bee Journal 120(5): 357-362 (1980) has also explored single-sided sections, although not necessarily of plastic. His innovations are the use of a piggyback mounting, cells of all combs facing in the same direction, and extra-deep cells. He found that bees would draw out, fill and seal cells up to $1\frac{1}{4}$ inches deep (3·2 cm). Besides rectangular sections, he uses equilateral triangles, which also form the basis of a modular hive he has designed.

All the sections mentioned are mounted in appropriate frames or other holders, in a shallow super. A Langstroth super holds 36 of the round sections, 4 to a frame. The cassettes can be mounted 3 in a frame 37.2×10.5 cm internally or 4 in a frame 42.0×12.4 cm, or in other sizes with appropriate packing.

More orthodox sections in plastic can also be obtained, either flat for folding (e.g. from Thorne in England), or rectangular with a glass box for marketing (e.g. from Graze in Germany).

Addresses

The Happy Hive, 4476 Tulane, Dearborn Heights, MI 48125, USA Ross Rounds, PO Box 485, Massillon, OH 44646, USA Hafelder Kunststoffwerk, Ing. J. Zittmayr, Bad Wimsbach, Austria E. H. Thorne (Beehives) Ltd, Beehive Works, Wragby, Lincoln, UK Chr. Graze KG, Strümpfelbacher Strasse 21, 7056 Weinstadt (Endersbach), German Federal Republic

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