

Traits

There are a large number of traits that Australian beekeepers are interested in. Honey production is considered the most important trait (Table 1).

Table 1. Relative importance (%) of traits to recreational/semi-commercial (<200 colonies), commercial (200-800 colonies), and large commercial (>800 colonies) beekeepers. Cells are coded based on importance from high (green) to low (red). Results from 2021 Plan Bee survey

| Traits | <200 | 200-800 | >800 | Overall |
|---|------|---------|------|---------|
| Honey production | 15.8 | 17.0 | 21.5 | 16.4 |
| Aggression | 10.5 | 11.8 | 3.7 | 10.2 |
| Calmness | 10.3 | 5.9 | 2.8 | 9.1 |
| Hygienic behaviour | 4.9 | 10.4 | 2.8 | 5.6 |
| Brood pattern | 4.8 | 5.2 | 5.5 | 4.9 |
| Hive cleanliness | 4.6 | 3.5 | 1.8 | 4.2 |
| Swarm tendency | 4.6 | 1.5 | 1.1 | 3.9 |
| Small hive beetle resistance | 3.3 | 3.1 | 11.0 | 3.9 |
| Brood area | 3.8 | 1.9 | 2.6 | 3.4 |
| Pollination | 3.4 | 2.9 | 3.2 | 3.3 |
| Spring build-up | 2.7 | 5.5 | 3.1 | 3.2 |
| Chalkbrood resistance | 2.5 | 5.2 | 4.4 | 3.0 |
| Over-wintering | 2.7 | 2.9 | 3.7 | 2.8 |
| European foulbrood resistance | 2.7 | 1.9 | 3.7 | 2.6 |
| Varroa resistance | 2.6 | 2.0 | 2.1 | 2.5 |
| Queen acceptance | 1.8 | 3.0 | 7.1 | 2.4 |
| Ability to withstand extreme weather | 2.3 | 1.9 | 1.1 | 2.2 |
| Nosema resistance | 2.1 | 1.4 | 2.8 | 2.0 |
| Pollen production | 2.0 | 1.3 | 1.5 | 1.9 |
| Food stores in the brood nest | 1.6 | 1.0 | 3.4 | 1.7 |
| Quickly adapt brood rearing to conditions | 1.6 | 1.0 | 1.8 | 1.5 |
| Propolis production | 1.5 | 0.7 | 1.1 | 1.3 |
| Race | 0.9 | 3.5 | 0.8 | 1.3 |
| Wax production | 1.4 | 0.6 | 0.9 | 1.3 |
| Withstand travel | 1.1 | 0.5 | 1.9 | 1.1 |
| Body size | 1.0 | 1.3 | 1.0 | 1.0 |
| Royal jelly production | 0.9 | 0.8 | 1.4 | 1.0 |
| Burr/brace comb | 1.0 | 0.5 | 0.4 | 0.9 |
| Drone production | 0.8 | 1.1 | 0.8 | 0.8 |
| Colour | 0.6 | 0.7 | 0.9 | 0.7 |