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Editor Ulaş ACARÖZ

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Editor's Note

The first ‘International Congress on Bee Sciences’ was organized online and free of charge. We are very happy and proud that various Bee science-related fields attended the congress. During this event, distinguished and respected scientists came together to exchange ideas, develop and implement new researches and joint projects. There were 25 invited speakers from 18 different countries. The scientific committee of the congress consisted of 211 scientists from more than 160 universities. Almost 500 participants participated in the congress. We would like to thank all participants and supporters. Hope to see you at our next congress.

Best wishes from Turkey

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ORAL PRESENTATIONS

Invited Oral Presentation

Quality Criteria in Queens Reared by Commercial Queens Enterprises and their Importance For Turkish Beekeeping

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Abstract:

Honey bees are social insects that live in communities called colonies. Under normal conditions, there are tens of thousands of worker bees and a few hundred drones, the number of which varies according to the seasons, with a queen in this social structure. The queen is the only individual of the colony capable of laying eggs, the mother of all colony individuals and the genetic source of all hereditary characteristics of the colony. Because it is the source of the hereditary structure, the strength of the colony, its hard work, being sensitive or resistant to diseases, being good-natured or combative, wintering ability, honey yield, tendency to swarm and propolis collection, etc., depend on the queen and the drones that mate with her. A good quality queen should have a high body weight, multiple ovaries and a large spermatheca. In addition, the queen must mate successfully and store sufficient spermatozoa in the spermathecae sac and be free from diseases and pests. On the other hand, it should not be forgotten that the performance of the colony varies depending on the genetic structure of the queens as well as the genetic structure of the drones mating with her. This shows us that to increase colony performance, it is not only sufficient to rearing quality queens, but also to rearing quality drones. Especially in commercial queen rearing, rearing drones in sufficient quantity and quality is the most important factor that closely affects the quality of the queen produced.

Keywords: Honeybee, Queen bee, Queen rearing, Quality criteria, Turkey