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ADVANCING HONEY BEE BREEDING: A REVIEW OF THE MOST EFFECTIVE METHODS FOR INTRODUCING NEW QUEEN BEES

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Abstract – The aim of this review article is to identify the most commonly used methods for introducing new queen bees to a colony and to evaluate their success rates. Through a literature review, the authors select the most frequently used methods and assess their advantages and disadvantages, as well as the success rate for each method. While beekeepers have developed various methods for introducing new queen bees, there have been no comprehensive studies to determine which methods have the highest success rates. Successful introduction of a new queen bee is crucial for beekeeping, as unsuccessful introductions can result in the loss of queen bee material, colony collapse, development of laying worker bees and reduced productivity of the colony.

Keywords – *Beekeeping; laying worker bees; queen bee introduction methods; queen honey bee rearing; queen bee productivity; queen bee replacement; queen bee success rate; queen rearing*