Abstract & Introduction

Winterization of European Honey Bees (Apis mellifera) in Southeastern Minnesota and Western Wisconsin

Emily Hoffman and Ashley Ollivier

Winona State University

Dry Sugar Method (Mountain Camp Method)

This method of moisture control involves pouring several pounds of dry sugar on top of newspaper laid across the frames of the top deep box. This dry sugar is very heavy and will not easily pass through the comb that the bees build. It will provide a supplemental food source for the bees if they need to supplement their moisture intake. The dry sugar is also useful as a granulated source of moisture for the bees to absorb and provide a food source to the hive.

Moisture Quilt Method

This method of moisture control involves the use of a moisture quilt. The moisture quilt is placed on top of the frames of the sub-box. The quilt is made of a combination of absorbent materials, such as cotton or wool, and is designed to absorb moisture from the frames. The moisture quilt is further secured by a sheet of plastic to prevent any moisture from escaping. This method is effective in maintaining a consistent moisture level in the hive.

Table:

<table>
<thead>
<tr>
<th>Moisture Method</th>
<th>% Survival</th>
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<tbody>
<tr>
<td>Dry Sugar</td>
<td>0%</td>
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<tr>
<td>Moisture Quilt</td>
<td>0.9%</td>
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</tbody>
</table>

CONCLUSION

From the data collected in the study, it was found that the Moisture Quilt Method had the highest percentage of survival compared to the Dry Sugar Method. The Moisture Quilt Method maintained a consistent moisture level in the hive, which provided a better environment for the bees to survive the winter. Further research is needed to determine the effectiveness of other moisture control methods in winterizing European honey bees.

Participants

Dr. Scott, Beekeeper 1

Dr. Hoffman, Beekeeper 2

Dr. Ollivier, Beekeeper 3

Dr. Hoffman, Beekeeper 4

Dr. Ollivier, Beekeeper 5

Dr. Ollivier, Beekeeper 6

Dr. Hoffman, Beekeeper 7

Dr. Ollivier, Beekeeper 8

Dr. Hoffman, Beekeeper 9

Dr. Ollivier, Beekeeper 10