



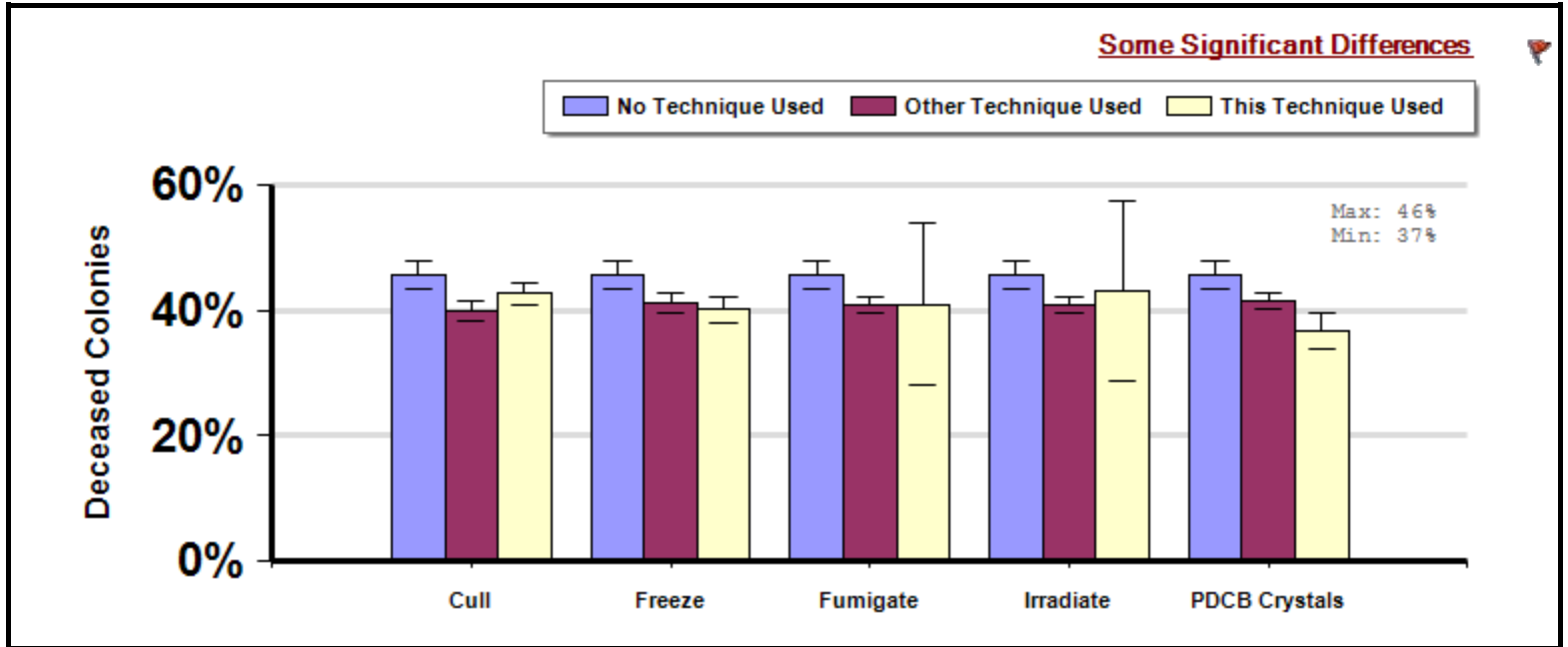
Brood Comb Treatment Before Reuse

Management Survey 2015

Average winter colony mortality reported by beekeepers who treated brood comb differently before re-using them between April and March.

Winter

Report ID: 74-2015



Interpretation

Beekeepers who reported freezing, or using paradichlorobenzene (PDCB) crystals lost significantly fewer overwintering colonies than beekeepers who did not treat the comb in any particular way. To explain further, beekeepers who froze their comb before reuse saw 5.4 less overwintering deaths out of 100 managed colonies (11.9% fewer losses) than beekeepers who did not use any technique. Also, beekeepers who used PDCB crystals on removed brood comb lost 8.8 fewer colonies out of 100 managed colonies (19.3% fewer losses) than beekeepers who did not use any technique. Beekeepers who reported culling, fumigating or irradiating their brood comb after removal did not suffer fewer or greater losses than beekeepers who did not use these techniques.

Survey Question

Between April, 2014 and March, 2015, before you re-used brood comb that you had taken out of production or purchased, did you...

Check all that apply

- I did not reuse any old brood comb
- Cull any particularly old or bad combs and replace them
- Irradiate the comb
- Fumigate the comb with acetic acid
- Freeze the comb
- Store the comb with paradichlorobenzene crystals
- Did not treat the comb in any particular way
- Other (please specify)

| | | | | | |
|--|--|-----------------------------|----------------------------------|------------------------------------|---------------------|
| | | Total Number of Respondents | Total Number of Colonies Managed | Average Number of Colonies Managed | Average Colony Loss |
|--|--|-----------------------------|----------------------------------|------------------------------------|---------------------|

| | | Providing Valid Responses | | | | |
|---------------|----------------------|---------------------------|---------|-------|----------------|---------------------------|
| | | | | Mean | Standard Error | Mean(%) [Lower, Upper] CI |
| Cull | No Technique Used | 994 | 53,343 | 53.7 | 11.4 | 45.5 [43.3,47.8] |
| | Other Technique Used | 2,078 | 59,197 | 28.5 | 10.6 | 39.8 [38.2,41.4] |
| | This Technique Used | 1,468 | 243,175 | 165.7 | 49.9 | 42.7 [41.0,44.4] |
| Freeze | No Technique Used | 994 | 53,343 | 53.7 | 11.4 | 45.5 [43.3,47.8] |
| | Other Technique Used | 2,229 | 217,658 | 97.6 | 32.3 | 41.2 [39.7,42.8] |
| | This Technique Used | 1,212 | 72,454 | 59.8 | 21.4 | 40.1 [38.2,42.0] |
| Fumigate | No Technique Used | 994 | 53,343 | 53.7 | 11.4 | 45.5 [43.3,47.8] |
| | Other Technique Used | 3,362 | 283,387 | 84.3 | 22.7 | 40.9 [39.7,42.1] |
| | This Technique Used | 17 | 822 | 48.4 | 28.1 | 40.9 [28.0,53.9] |
| Irradiate | No Technique Used | 994 | 53,343 | 53.7 | 11.4 | 45.5 [43.3,47.8] |
| | Other Technique Used | 3,358 | 271,532 | 80.9 | 22.4 | 40.9 [39.6,42.1] |
| | This Technique Used | 22 | 12,716 | 578.0 | 548.8 | 43.1 [28.8,57.5] |
| PDCB Crystals | No Technique Used | 994 | 53,343 | 53.7 | 11.4 | 45.5 [43.3,47.8] |
| | Other Technique Used | 2,972 | 270,177 | 90.9 | 25.6 | 41.5 [40.2,42.8] |
| | This Technique Used | 441 | 22,089 | 50.1 | 16.7 | 36.7 [33.8,39.5] |

Comments About This Data

Relevant Links, References, and Citations

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