



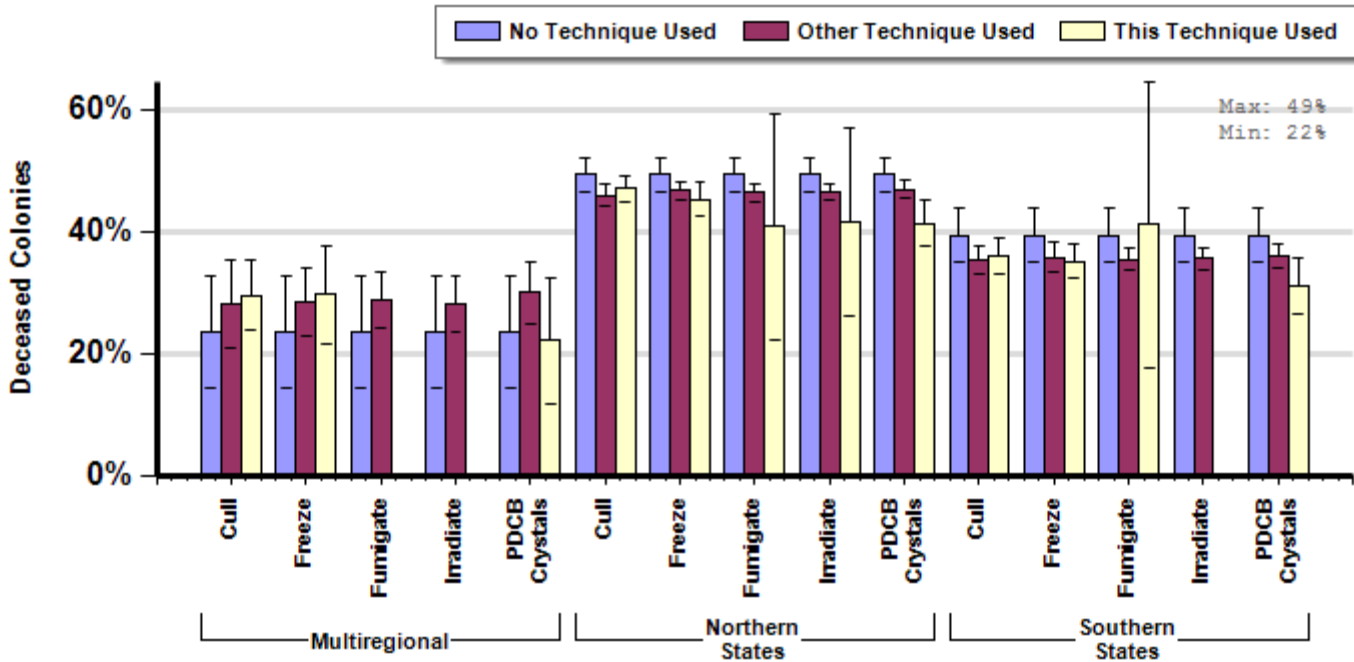
Brood Comb Treatment Before Reuse by Region

Winter

Average winter colony mortality suffered by beekeepers who reported different treatments before reusing old comb between April and March.

Report ID: 80-
2015

Some Significant Differences (within regions)



Respondent Ratio



Interpretation

Northern beekeepers who stored brood comb with paradichlorobenzene (PDCB) crystals before reuse reported 8 fewer overwintering colony deaths than beekeepers who did not treat the comb in any particular way. In other words, beekeepers in the northern region who used PDCB crystals lost 16.3% fewer overwintering colonies than beekeepers who did not use any brood comb treatment.

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 Providing Valid Responses | Total Number of Colonies Managed | Average Number of Colonies Managed | | Average Colony Loss Mean(%) [Lower, Upper] CI | |
|---------------------|-----------------|----------------------|---|----------------------------------|------------------------------------|----------------|--|-----------------|
| | | | | | Mean | Standard Error | | |
| Multiregional | Cull | No Technique Used | 28 | 30,503 | 1089.4 | 294.1 | 24 [14.2, 32.8] | |
| | | Other Technique Used | 73 | 50,553 | 692.5 | 236.5 | 28 [21.0, 35.1] | |
| | | This Technique Used | 59 | 179,366 | 3040.1 | 1154.7 | 30 [23.8, 35.2] | |
| | Freeze | No Technique Used | 28 | 30,503 | 1089.4 | 294.1 | 24 [14.2, 32.8] | |
| | | Other Technique Used | 100 | 171,357 | 1713.6 | 672.2 | 28 [22.8, 34.0] | |
| | | This Technique Used | 32 | 58,562 | 1830.1 | 753.4 | 30 [21.5, 37.6] | |
| | Fumigate | No Technique Used | 28 | 30,503 | 1089.4 | 294.1 | 24 [14.2, 32.8] | |
| | | Other Technique Used | 132 | 229,919 | 1741.8 | 539.7 | 29 [24.1, 33.3] | |
| | Irradiate | No Technique Used | 28 | 30,503 | 1089.4 | 294.1 | 24 [14.2, 32.8] | |
| | | Other Technique Used | 131 | 229,917 | 1755.1 | 543.7 | 28 [23.6, 32.7] | |
| | PDCB Crystals | No Technique Used | 28 | 30,503 | 1089.4 | 294.1 | 24 [14.2, 32.8] | |
| | | Other Technique Used | 112 | 221,868 | 1981.0 | 632.2 | 30 [24.7, 35.0] | |
| | | This Technique Used | 20 | 8,051 | 402.6 | 258.1 | 22 [11.7, 32.4] | |
| | Northern States | Cull | No Technique Used | 708 | 9,475 | 13.4 | 2.9 | 49 [46.6, 51.9] |
| | | | Other Technique Used | 1,825 | 13,890 | 7.6 | 0.7 | 46 [44.2, 47.7] |
| This Technique Used | | | 968 | 33,697 | 34.8 | 11.5 | 47 [44.9, 49.1] | |

| | | | | | | | |
|-----------------|---------------|----------------------|-------|--------|------|------|-----------------|
| | | Used | | | | | |
| | Freeze | No Technique Used | 708 | 9,475 | 13.4 | 2.9 | 49 [46.6, 51.9] |
| | | Other Technique Used | 2,147 | 41,282 | 19.2 | 5.2 | 47 [45.0, 48.2] |
| | | This Technique Used | 646 | 6,305 | 9.8 | 2.2 | 45 [42.5, 47.9] |
| | Fumigate | No Technique Used | 708 | 9,475 | 13.4 | 2.9 | 49 [46.6, 51.9] |
| | | Other Technique Used | 2,784 | 47,445 | 17.0 | 4.0 | 46 [44.9, 47.7] |
| | | This Technique Used | 9 | 142 | 15.8 | 5.9 | 41 [22.3, 59.2] |
| | Irradiate | No Technique Used | 708 | 9,475 | 13.4 | 2.9 | 49 [46.6, 51.9] |
| | | Other Technique Used | 2,775 | 46,997 | 16.9 | 4.0 | 46 [45.0, 47.7] |
| | | This Technique Used | 18 | 590 | 32.8 | 12.6 | 42 [26.1, 57.1] |
| | PDCB Crystals | No Technique Used | 708 | 9,475 | 13.4 | 2.9 | 49 [46.6, 51.9] |
| | | Other Technique Used | 2,531 | 36,104 | 14.3 | 3.9 | 47 [45.4, 48.3] |
| | | This Technique Used | 262 | 11,483 | 43.8 | 19.5 | 41 [37.6, 45.0] |
| Southern States | Cull | No Technique Used | 241 | 6,209 | 25.8 | 13.8 | 39 [34.8, 43.7] |
| | | Other Technique Used | 975 | 27,038 | 27.7 | 15.8 | 35 [33.0, 37.5] |
| | | This Technique Used | 422 | 24,807 | 58.8 | 29.7 | 36 [33.0, 38.8] |
| | Freeze | No Technique Used | 241 | 6,209 | 25.8 | 13.8 | 39 [34.8, 43.7] |
| | | Other Technique Used | 873 | 45,053 | 51.6 | 22.7 | 36 [33.4, 38.1] |
| | | This Technique Used | 524 | 6,792 | 13.0 | 1.9 | 35 [32.2, 37.8] |
| | Fumigate | No Technique Used | 241 | 6,209 | 25.8 | 13.8 | 39 [34.8, 43.7] |

| | | | | | | |
|---------------|----------------------------|-------|--------|------|------|------------------------|
| | Other Technique Used | 1,389 | 51,165 | 36.8 | 14.3 | 35 [33.6, 37.2] |
| | This Technique Used | 8 | 680 | 85.0 | 58.4 | 41 [17.7, 64.6] |
| Irradiate | No Technique Used | 241 | 6,209 | 25.8 | 13.8 | 39 [34.8, 43.7] |
| | Other Technique Used | 1,394 | 39,721 | 28.5 | 11.3 | 35 [33.7, 37.3] |
| PDCB Crystals | No Technique Used | 241 | 6,209 | 25.8 | 13.8 | 39 [34.8, 43.7] |
| | Other Technique Used | 1,239 | 49,318 | 39.8 | 16.0 | 36 [34.1, 38.0] |
| | This Technique Used | 158 | 2,527 | 16.0 | 2.3 | 31 [26.3, 35.7] |

Comments About This Data

Relevant Links, References, and Citations



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