

APPENDIX A-5

A QUICK MEASURE OF THRIPS POPULATIONS  
USING BUDS OF SUGAR MAPLE REGENERATION

PROTOCOL

Developed by

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Purpose:

- To find a quick, easy method to compare thrips populations from year to year or stand

- To relate bud counts to stand defoliation

Method Used:

- Sampling was done when buds on sugar maple regeneration were 1-1 1/2" long (late April-early May)
- Five overstory maples were selected on a transect through the sugarbush
- 100 buds were collected and bagged together from sugar maple regeneration around each of the five sample trees
- Each bud was taken apart and all leaves unfolded. All adult thrips were counted.
- Counts were made within several days of collection
- Defoliation of each overstory tree was evaluated by mid-June

### How it Worked:

- Sampling and counting could be completed in as little as an hour per stand
- Thrips numbers in regeneration buds were correlated to overstory defoliation
- Annual average bud counts in the region paralleled yearly fluctuations in mapped acres defoliated
- The method is not useful for predictive purposes because there is little lead time between when counts are made and when defoliation occurs

### How Technique Could be Improved:

- If counts/bud instead of counts/100 buds are desired, buds need to be bagged separately, or counts need to be made on-site. The thrips come out of the buds in transit
- Because many buds have "zero" counts, a sequential sampling method would save a time

THRIPS SURVEY: BUD COUNTS

Owner: \_\_\_\_\_

Town: \_\_\_\_\_

Observer: \_\_\_\_\_

Bud #      # of Thrips per Bud Collected around Tree #:

1	2	3	4	5
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