

Result Demonstration Report

House Fly Densities around Ag Barns and Dairies in Texas

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House flies pose a serious pest for barn/stable operators and dairy operators throughout the United States. When the population rises well above a manageable rate they begin to travel to nearby houses and businesses. House flies do not bite but are extremely annoying and are not appreciated by the general public. Although most livestock can tolerate several hundred house flies at one time, people become discouraged at the site of one house fly. In addition to their nuisance status, house flies have the ability to mechanically transmit over 200 known pathogens that cause disease to humans and animals. Therefore it is important for barn/stable operators and dairy operators to keep their house fly numbers suppressed.

Objective

- Record house fly numbers during the 2013 fly season in Districts 3, 4, 5, 7 and 8
 in Texas with scatter bait stations containing two different types of baits
 (QuickBayt, QuikStrike, and Golden Malrin).
- Compare the products and number of dead house flies in order to determine which scatter bait is the most effective at attracting and killing house flies.

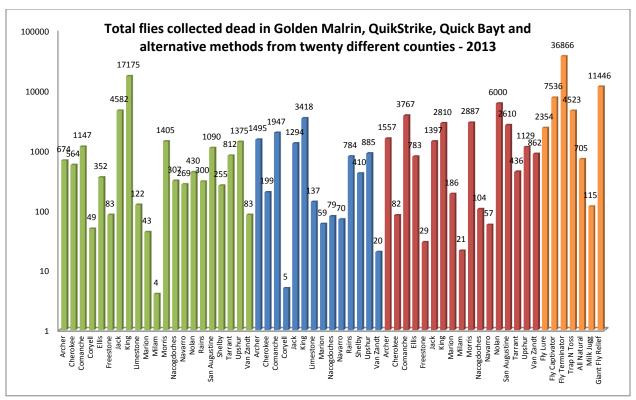
Methods

- The trial was set up from July until September 5.
- One location (livestock barn) was chosen and traps were set up.
- Collections were made on a monthly (every 4 weeks) basis from the locations.
- Bait stations were placed or hung 4 ft above the ground out of animal reach.

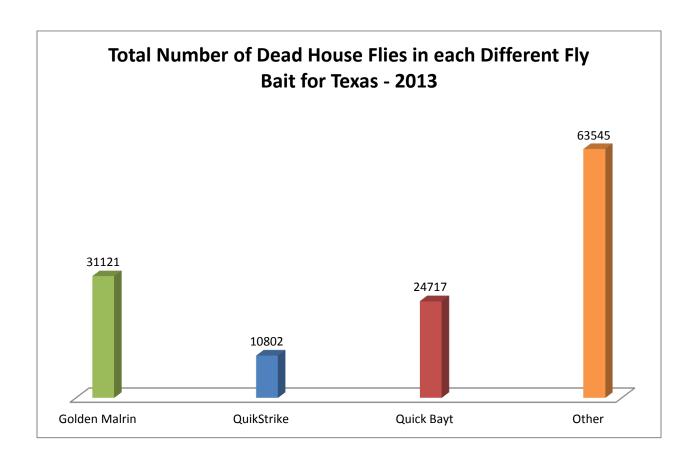
- The sites compared different products (2 bait stations/site).
- Bait stations were constructed from gallon jugs (i.e. milk jugs) and filled with either 1 oz of QuickBayt or 1 oz of Golden Malrin.
- At each visit, the old bait was removed.
- New bait was placed in the bait station at each visit.
- The collected bait and dead house flies were then removed from the barn and fly numbers were recorded.
- In addition to the traps, spot cards were placed by each trap to evaluate the number of house flies resting in the vicinity.

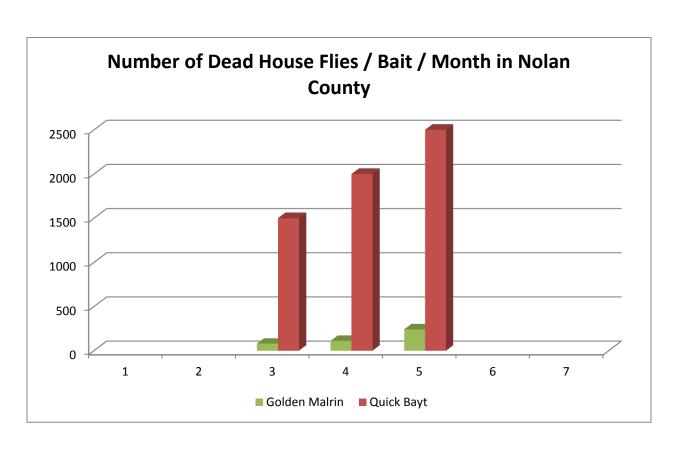
Data & Results

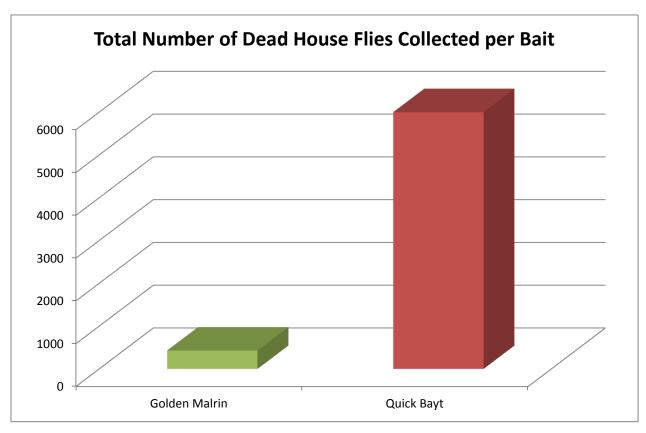
Location	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
1	5/13/2013	6/10/2013	7/8/2013	8/5/2013	9/2/2013	10/1/2013	10/31/2013
Golden Malrin			80	110	240		
Spot Card							
Quick Bayt			1500	2000	2500		
Spot Card							

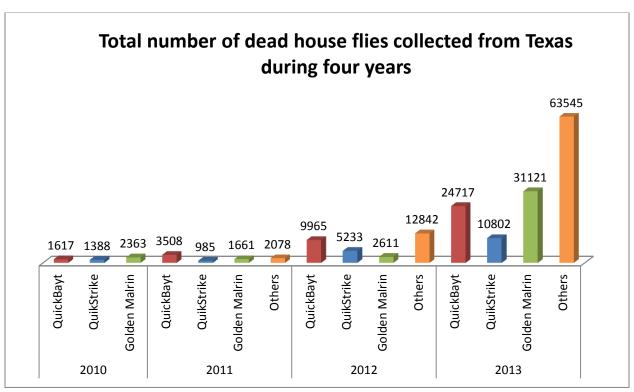


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Conclusion

The total number of dead house flies collected equaled 6430. The Golden Malrin bait collected 430 house flies and QuickBayt collected 6000.

Due to the short duration of this study (one fly season), conclusions and statistical analysis could not be applied to the data; further trials are needed to gain enough data for analysis.

This year a total of 23 agents in 23 counties throughout north, central and east Texas took part in the house fly demonstration project. The total number of dead house flies collected increased dramatically with the increased number of sites testing. Each county tested Golden Malrin and therefore it collected the largest number of house flies when compared to the other scatter baits (31072). The effectiveness of QuickBayt seems to be decreasing in some locations, reasons unknown at this time, but the bait still collected a total of 24717 house flies. Although the QuikStrike numbers are much higher than previous years, they are still lower than the other baits with only 10797. The alternative pheromone traps are proving to be worth their money and collecting large numbers of house flies. Data shows some of the traps to be more effective than others but for the most part the more common (Fly Terminator, Trap N Toss, Fly Captivator and Giant Fly Relief) traps are extremely effective with 55695 house flies.

Although all the baits are effective in attracting house flies, their effectiveness for killing house flies is still under investigation. Laboratory work needs to be done to test the efficacy of the baits themselves when house flies are permitted to leave a specific location. There is thought that the active ingredient only knocks-down the house flies temporarily or that the active ingredient does not begin to work right away, allowing the house flies to leave the bait stations prior to dying.