



Area-Wide Integrated Pest Management Framework Components:

- Population Monitoring
- Field Sanitation
- Protein Bait
- Male Annihilation
- Biological Controls

What is protein bait?

Flies need sugars and proteinaceous food to survive and mature. They utilize various sources such as fungi, bird droppings, pollen, etc. Because of their inherent needs, fruit flies are highly attracted to high-quality protein and sugar baits. Protein bait lures will capture both males and females of most fruit fly species but may not be as attractive to a given fruit fly species as the male lures. Protein bait lures are used primarily for monitoring purposes, while protein bait sprays are intended for fruit fly control.

For more information, contact:
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HAW-FLYPM

Hawaii Area-Wide Fruit Fly Integrated Pest Management

The HAW-FLYPM program integrates cultural, chemical, and biological control measures to suppress and maintain pest populations below economic injury levels.

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Fruit Fly Protein Bait



HAW-FLYPM

Hawaii Area-Wide Fruit Fly Integrated Pest Management

Improving Hawaii's Agriculture Through Research, Education, and Innovation

A USDA/Agricultural Research Service-funded partnership with the University of Hawaii College of Tropical Agriculture and Human Resources Cooperative Extension Service and the Hawaii Department of Agriculture



How do protein baits work?

The baits are detected by fruit flies over short distances (10–20 ft). Some commercial protein baits are combined with other volatile odors that attract flies from slightly greater distances. Fruit flies attracted to the protein bait source are killed either by drowning in the protein slurry or by the action of a toxicant, if one is included.



What are some protein baits currently available?

Nulure® is commercially available in Hawaii. It can be used in bait traps or in tank mixes with pesticides labeled for the use. GF-120®, a spinosad protein bait, became commercially available in June 2002. It can be purchased from larger fertilizer and pesticide dealerships. There are other bait proteins, but they are not available in Hawaii at this time.



How safe is protein bait?

In the past, protein baits were combined with a tank mix of organophosphate pesticides. The organophosphate pesticide and protein bait residues on the plant killed the fly by contact or ingestion. Safety to humans and pets is based on the insecticide that is used.

A new commercial product, GF-120®, combines the bait with insecticide for ease of use. The toxicant, spinosad, is very safe to humans. The fruit flies are killed after feeding on droplets of the product dispersed on plant foliage.

Do I need pesticide-use certification to buy protein bait?

Neither of the protein baits currently available in Hawaii are labeled as restricted-use chemicals. This means that one can purchase the product without a pesticide-use license. Of course, the user of a pesticide with any protein bait must follow label instructions and restrictions.

