



Practical Biosecurity Programs
Standard Biosecurity Protocol (SBP)
SBP 15

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Pesticides for Biosecurity Purposes

1. **Purpose:** To reduce or eliminate animal pests & plants that may harbor disease
2. **Responsibility:** Farm Staff Who Have Taken Pesticide Application Course
3. **Frequency:** Ongoing
4. **Biosecurity Protocols**
 - 4.1 Pesticide application is to be done by farm staff or external contractors who have taken the Pesticide Application Course
 - 4.2 Follow label dilution instructions and pesticide application guides
 - 4.3 Pesticides are chemicals used to kill, destroy or inhibit pests
 - 4.4 Herbicides are chemicals used to spray vegetation to kill and inhibit plant growth



Picture 15.1



Picture 15.2

Vaillancourt, 2003

- 4.5 The pests that can be treated with pesticides are:
 - Rodents: mice & rats
 - Flies, various: house fly most common
 - Other insects: Darkling beetles, fleas
 - Ectoparasites: Northern fowl mite, Red mite, lice, mange causing parasitic mites
- 4.6 The choice of pesticide is determined by the pest you are trying to get rid of from your farm site

4.7 Common groups of pesticides by pest:

Rodenticides: coumarins, diphacinone, pindone, strychnine

Comes in mash, pellet or block form and are used in bait stations

Insecticides: carbamates, mercaptans, naphthalene, rotenone, methomyl, z-9-tricene organophosphates, systemic organophosphates, synthetic pyrethroids. Insecticides can be a powder, an aerosol or need to be diluted in water for use

Herbicides: phenoxyacetic acid, glyphosate, arsonate comes in concentrated liquid form to be diluted with water

4.8 Rodenticides are not to be placed in pens or in areas where the animal could come in contact. These pesticides are placed in bait stations and the bait stations are placed along the interior and exterior walls of the barn

4.9 Powders like carbaryl and carbamate, can be used to dust poultry & livestock for the treatment of ectoparasites like lice or mites. The powder stays on the animal and is effective in treating the pest over a period time

4.10 Fly bait powders which have attractants in them, can be placed in open containers away from the livestock



Picture 15.3



Picture 15.4

Vaillancourt, 2003

4.11 Powders can also be used for treating pests as they track through the insecticide powder

4.12 Aerosols can be used in confined spaces to knock down adult insects like flies

4.13 Pesticides and herbicides that need to be diluted in water for use are in concentrated form and care must be taken when handling as they are potent poisons when in the concentrated form

4.14 For dilution rates, follow the manufacturer's directions on the amount of concentrate to add to a set volume of water

4.15 Record use of pesticides on the **SBF5: Disinfectant, Pesticide & Herbicide Use Chart**

5. Biosecurity Deviation Protocols

- 5.1 If pest numbers are increasing, determine the extent of the infestation and treat with the proper pesticide, treat the affected area(s) and monitor results and repeat as necessary
- 5.2 If the pesticide seems to be ineffective, change the pesticide as some pests may build up immunity or mutate so they can withstand the effects of the pesticides you are using. This is most important when dealing with insects like house flies whose life cycle is very quick during warmer weather

6. Biosecurity Records

SBF5: Disinfectant, Pesticide & Herbicide Use Chart