PESTICIDE USE

Guidelines for the Homeowner

- **What are pests and pesticides?**
- **Is it necessary to make a pesticide application?**
- **Which pesticide product should be applied for pest control?**
- **What is on a pesticide label?**
- **Other details to consider when applying pesticides**
- **Always...**

What are pests and pesticides?

Any living organism that is a nuisance to humans can be classified as a pest. Bothersome pests may include weeds in lawns or gardens; insects in lawns, gardens or homes; fungus in trees or swimming pools; or, animals in gardens, homes or yards. Many of us rely on the use of pesticides to control those pests that we deem bothersome or that cause economic loss to us.

Pesticides are chemically designed agents used to control, repel or destroy pests. And, just as there are many different kinds of pests, there are also many different types of pesticides. The most common categories of pesticides include herbicides, insecticides, fungicides and rodenticides.

All pesticides are toxic to some degree simply because desired results are achieved by contaminating the targeted pest. However, the Environmental Protection Agency (EPA) reviews the impact of pesticides on the environment and governs them by denying or banning the use of some pesticides and restricting the use of others. This has lead to the use of pesticides which are less harmful to the environment. Still, the manner in which pesticides are used can also help lessen the possibility of harm.

Pesticides are generally safe when they are handled and applied correctly. When precautions are taken while handling and applying pesticides, there is less chance of accidental exposure of the applicator, other persons, pets and the surrounding environment.

Exercising common-sense safety and following label directions aid in the safe use of pesticides.

Is it necessary to make a pesticide application?

Make a positive identification of the pest. Sources of information include reference books, County Extension Service Agents and pesticide dealers.

Determine which control alternative is the least toxic but will still result in the desired level of pest control.

Determine if the extent of the infestation warrants applying a pesticide. If a pesticide application is needed, does the whole area need it or will a spot application manage the problem?

Determine whether you want to apply the pesticide or hire it done professionally.

Which pesticide product should be applied for pest control?

Read labels to determine what the active ingredient is and if it is toxic to the surrounding environment, such nearby water, plants and animals.

Narrow your choices, then choose the product with the appropriate active ingredient, formulation, target pests and sites where it can be used. Purchase according to the amount you will use in the current season, thus avoid having to store leftover pesticides.

County Extension Service Agents and pesticide dealers may be able to provide assistance when deciding which pesticide product to use.

Be sure you are properly certified to purchase and apply pesticides. Restricted use pesticides are more toxic and require special training to buy or apply them.

What is on a pesticide label?

Read the label of the product. The label will indicate when to apply the pesticide and what the application rate should be. If dilution is required, do it outdoors and mix only the amount needed for the area to be treated. Mixing stronger than the label rates does not make the pesticide work better, but it could result in harm to yourself, others and the area you are applying to.

Follow the label instructions for climatic conditions during application (wind speed, temperature, etc). Drift may harm or destroy surrounding plants, insects, animals or humans. NEVER apply pesticides, of any kind, if the wind is stronger than that allowed on the label.

Note the signal word on the label.

"Danger" (highly poisonous),

"Warning" (moderately poisonous)

"Caution" (least hazardous)

These indicate how hazardous a pesticide is if swallowed, inhaled or absorbed through the skin. Also be aware of the first aid instructions given on the label in case of an accidental exposure.

When mixing or applying a pesticide, wear rubber gloves and other items of protective clothing as required by the product label.

Be aware of the chemical or physical and environmental hazards listed on the label.

Other details to consider when applying pesticides

Avoid applying pesticides to non-targeted objects, food, plants, insects and animals.

Note the direction of the breeze and what in that area may be affected by your application of a pesticide. Do not apply pesticides on a windy day.

Make certain equipment is calibrated and in working condition. Over application may cause runoff or seepage and contaminate water supplies or leave harmful residues on the application area.

Keep records of the pesticide applications you make in the event a problem arises after the application is made. Include date and time of application, weather conditions, what pesticide is applied, target pest, area treated, active ingredient applied per area and other pertinent information.

Inform neighbors of when and what pesticide you will be applying so that they may act accordingly. Keep children and pets away during the application and for the required time, as stated on the label, after the application.

Always...practice the most appropriate IPM (Integrated Pest Management) method. Biological control uses natural enemies to target the pest. Cultural control could include mowing high and dethatching the lawn. And, chemical control involves the use of pesticides.

South Dakota Department of Agriculture
Division of Agricultural Services
Office of Agronomy Services
523 E Capitol Ave
Pierre, SD 57501
Toll Free in South Dakota: 800.228.5254
605.773.4432
Email: SDDAAgronomy@state.sd.us
Web: http://sdda.sd.gov