

NOTE REGARDING THE USE OF PESTICIDES IN MUSTARD IN CANADA

Although there is a wide variety of crop protection products labeled for use in mustard, climate and technological factors allow Canadian growers to minimize pesticide use in the crop. Our cold winter tends to kill off many overwintering diseases and a number of insects. Additionally, mustard varieties are available with tolerance to diseases like blackleg, so fungicides are not necessary for these diseases.

The key products labeled for mustard are given in the table below, along with some examples of MRLs around the world. In Canada, mustard cargos are routinely checked on a spot basis by the Canadian Grain Commission. These cargos are checked for pesticide residues. This data is given below as well (in the first column). You will notice that the cargo data shows that these products rarely occur in the mustard seed, and when they do appear in Canadian cargo loads, they are well within the strictest MRL levels set internationally.

SUMMARY REGARDING MUSTARD MRLS IN CANADA AND THE WORLD

Herbicides

- **Clethodim, sethoxydim and fenoxaprop**

These products are used for control of grassy weeds early in the season by mustard growers, months before harvest. The MRLs for the products are given in the Table.

- **Ethalfluralin, trifluralin**

These products are used for control of broadleaf weeds and grassy weeds. They are used as a soil applied product early in the season, months before harvest. Both products are immobile in mustard plants and it is unlikely that either would ever translocate into the crop. The MRLs for the products are given in the Table.

- **Ethametsulfuron**

This product is used early in the season, months before harvest, for control of weedy mustard species

Insecticides

Insecticides are used only on a portion of the crop and only in years or locations where insect outbreaks occur.

Table – MRLs and cargo data for products used in mustard

| Product | Cargo data | Canadian MRL | Japanese MRL | EU MRL | US MRL | CODEX MRL |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------|--------|-----------|
| Fenoxaprop | Loads tested 1998 through 2002 showed zero residues | 0.1 | 0.1 | 0.01 | NMS | NMS |
| Sethoxydim | No recent testing | 0.1 | 30 | 0.01 | NMS | NMS |
| Fluazifop-butyl | Loads tested 1998 through 2002 showed zero residues | 0.1 | 0.5 | 0.01 | NMS | NMS |
| Clethodim | No testing recently | 0.4 | 1 | 0.01 | 0.5 | NMS |
| Ethalfuralin | No recent testing | 0.1 | 0.02 | 0.01 | NMS | NMS |
| Trifluralin | Loads tested in years since 1994 have all shown zero levels of trifluralin | 0.1 | 2 | 0.01 | 0.05 | NMS |
| Ethametsulfuron | No samples tested | 0.1 | 0.02 | 0.01 | NMS | NMS |
| Deltamethrin | Loads tested since 1994 show zero residues | 0.1 | 1 | 0.01 | NMS | NMS |
| Lambda cyhalothrin | Loads tested since 1994 show zero residues | 0.1 | 1 | 0.02 | NMS | NMS |
| Malathion | Loads tested since 1999/00 showed zero residues. Loads from years before recent times (pre-2000) showed levels occasionally at 0.05 to 0.11 ppm | 0.1 | 2 | 0.01 | NMS | NMS |

NMS = No MRL set...Therefore the accepted MRL will be the default MRL. In the U.S. this will be technically zero.