



# METRIBUZIN

## For Weed Control in Potatoes

*Robert H. Callihan and Charlotte V. Eberlein*

Metribuzin, the active ingredient in the herbicides Sencor and Lexone, is widely used on potatoes in Idaho. This publication offers guidelines for use based on more than 20 years of field testing in Idaho, adjacent states and Canada.

These guidelines supplement directions on the manufacturer's label but do not substitute for them. Like all herbicides, metribuzin must be properly used to take full advantage of its strengths, allow for its limitations and avoid potential hazards of misuse.

### Strengths

Metribuzin has properties that enable it to fit with existing cultural practices and fill some gaps in chemical and cultural weed control.

- It can be applied to tolerant varieties preplant incorporated, preemergence or postemergence. In general, potatoes have best tolerance to metribuzin when it is applied preemergence.
- It can kill emerged weeds without damaging tolerant potato varieties.
- It is effective on a wide variety of weed species.
- It may provide significant partial control of hard-to-control perennial weeds such as quackgrass and Canada thistle.
- It may be applied by air or ground equipment or with sprinkler water.
- It is effectively incorporated into the soil by sprinkler irrigation or rain.
- It resists chemical breakdown enough that immediate incorporation is not critical. One inch of rain or sprinkler water will prevent its movement by wind and move it into the germination zone.
- It works well alone or in approved combinations with other herbicides registered for use on potatoes.

### Limitations

- Metribuzin may persist to injure crops grown in rotation with potatoes. Do not plant metribuzin-treated fields to crops other than those specified on the label for 1 year after treatment. Spring wheat and barley can be planted 8 months after treatments made before July 1. Tolerant cover crops and green manure that will not be grazed can be planted any time after treatment.
- If metribuzin is applied to potatoes after June 30, it may not decompose rapidly enough to avoid damaging certain crops planted after the potatoes are harvested.
- Metribuzin can persist in potato vines. If treated vines are dragged into thick bunches or windrows and plowed under, they may release enough metribuzin to injure the following crop.
- Do not apply metribuzin within 60 days of harvest.
- Some potato varieties are especially susceptible to metribuzin injury. See Table 1 on the next page for varietal tolerance to metribuzin applied preemergence. Do not make postemergence applications on early varieties, smooth-skinned white varieties or red potato varieties. The herbicide label lists several varieties that are especially susceptible to metribuzin injury.
- Preplant incorporated metribuzin can be used only on russeted or white skinned varieties that are not early maturing. See the Lexone and Sencor labels for listings of varieties that should not be treated with metribuzin applied preplant incorporated.
- Metribuzin can injure potatoes that are suffering from disease, a lack of water or nutrients, or very hot weather (hotter than 90°F).
- Metribuzin may injure emerged potatoes if applied during or immediately after heavy overcast or cloudy weather.