

**Table 27.** Longevity of triazine herbicides in soils (months).

Herbicide	Months
atrazine	6 - 12
simazine	6 - 12
cyanazine	2 - 4
propazine	6 - 10
prometon	8 - 18
ametryne	2 - 3
prometryne	2 - 6
metribuzin	2 - 4

- Agitation is necessary to keep the chemical in suspension.
- Low to intermediate water solubilities and are essentially non-volatile.
- Surfactants appear to increase the foliar activity of these herbicides. Nitrogen solution and other liquid fertilizers have been widely and successfully used as carriers.

- Postemergence herbicide use of the triazines requires the addition of oil concentrate or surfactants (adjuvants).
- Soil adsorption is greater under acidic conditions.
- All triazines are relatively persistent in soils and can cause carry-over or residue problems, particularly on sensitive vegetable crops.
- Good activity on annual broadleaf plants with less activity on grass and perennial broadleaf plants.

### Toxicological Properties

Acute Oral Toxicity	LD <sub>50</sub> (mg/kg)
atrazine	3080
simazine	5000
ametryn	1405
prometryn	3750
hexazinone	1690
metribuzin	1937

## UNCLASSIFIED HERBICIDES

### Important Members

**Table 28.** Important members of the unclassified herbicide family.

Common Name	Trade Name(s)	Manufacturer	Water Solubility (ppm)	Vapor Pressure (mm Hg @ 25-35° C)
Bentazon <sup>1</sup>	Basagran	BASF	500	<1.3 x 10 <sup>-7</sup> mbar
Glyphosate <sup>2</sup>	Roundup Rodeo	Monsanto Monsanto	12,000	1.9 x 10 <sup>-7</sup>
Ethofumesate	Prograss Nortron	Nor-AM	110	6.45 x 10 <sup>-7</sup>
Oxadiazon <sup>3</sup>	Ronstar	Rhone-Poulenc	7	1.0 x 10 <sup>-6</sup>
Quinclorac <sup>4</sup>	Drive, Facet, Impact	BASF	dispersible	<1 x 10 <sup>-7</sup>

<sup>1</sup>**Bentazon** is also often listed in the Benzothiadiazoles herbicide family, as an Unclassified Herbicide or as an Organic Herbicide.

<sup>2</sup>**Glyphosate** is also listed as a member of the Amino Acid Derivative herbicide family.

<sup>3</sup>**Oxadiazon** is also grouped in the Substituted Diphenyl Ether herbicide family, as a miscellaneous Organic Herbicide, or as a Oxadiazolin.

<sup>4</sup>**Quinclorac** has not yet been classified in a specific herbicide family but does belong to the Quinolinecarboxylic acid chemical family.