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Table 1. Crop scientific name and common classification

Crop	Family	Genus	Species	Common name
Alfalfa	Fabaceae	<i>Medicago</i>	<i>sativa</i>	legume
Barley	Poaceae	<i>Hordeum</i>	<i>vulgare</i>	grass
Canola	Brassicaceae	<i>Brassica</i>	<i>napus</i>	mustard
Corn	Poaceae	<i>Zea</i>	<i>mays</i>	grass
Dry bean	Fabaceae	<i>Phaseolus</i>	<i>vulgaris</i>	legume
Field pea	Fabaceae	<i>Pisum</i>	<i>sativum</i>	legume
Flax	Linacea	<i>Linum</i>	<i>usitatissimum</i>	cosmopolitan
Oat	Poaceae	<i>Avena</i>	<i>sativa</i>	grass
Potato	Solanaceae	<i>Solanum</i>	<i>tuberosum</i>	nightshade
Safflower	Asteraceae	<i>Carthamus</i>	<i>tinctorius</i>	composite
Soybean	Fabaceae	<i>Glycine</i>	<i>max</i>	legume
Sugarbeet	Chenopodiaceae	<i>Beta</i>	<i>vulgaris</i>	goosefoot
Sunflower	Asteraceae	<i>Helianthus</i>	<i>annuus</i>	composite
Wheat	Poaceae	<i>Triticum</i>	<i>aestivum</i>	grass

Table 2. Weed scientific name and common classification

Weed	Family	Genus	Species	Common name
A. smartweed	Polygonaceae	<i>Polygonum</i>	<i>pennsylvanicum</i>	buckwheat
B. wormwood	Asteraceae	<i>Artemisia</i>	<i>biennis</i>	composite
Barnyardgrass	Poaceae	<i>Echinochloa</i>	<i>crusgalli</i>	grass
Black medic	Fabaceae	<i>Medicago</i>	<i>lupulina</i>	legume
C. cocklebur	Asteraceae	<i>Xanthium</i>	<i>strumarium</i>	composite
C. mallow	Malvaceae	<i>Malva</i>	<i>neglecta</i>	mallow
C. ragweed	Asteraceae	<i>Ambrosia</i>	<i>artemisiifolia</i>	composite
C. thistle	Asteraceae	<i>Cirsium</i>	<i>arvense</i>	composite
Downy brome	Poaceae	<i>Bromus</i>	<i>tectorum</i>	grass
Green foxtail	Poaceae	<i>Setaria</i>	<i>viridis</i>	grass
Hairy nightshade	Solanaceae	<i>Solanum</i>	<i>physalifolium</i>	nightshade
Horseweed	Asteraceae	<i>Conyza</i>	<i>canadensis</i>	composite
Kochia	Chenopodiaceae	<i>Bassia</i>	<i>scoparia</i>	goosefoot
Lambsquarters	Chenopodiaceae	<i>Chenopodium</i>	<i>album</i>	goosefoot
Lanceleaf sage	Lamiaceae	<i>Salvia</i>	<i>reflexa</i>	mint
Marshelder	Asteraceae	<i>Iva</i>	<i>annua</i>	composite
Nightshade	Solanaceae	<i>Solanum</i>	<i>nigrum</i>	nightshade
Prickly lettuce	Asteraceae	<i>Lactuca</i>	<i>serriola</i>	composite
Quackgrass	Poaceae	<i>Elymus</i>	<i>repens</i>	grass
R. thistle	Chenopodiaceae	<i>Salsola</i>	<i>tragus</i>	goosefoot
Redroot pigweed	Amaranthaceae	<i>Amaranthus</i>	<i>retroflexus</i>	amaranth
Sunflower	Asteraceae	<i>Helianthus</i>	<i>annuus</i>	composite
W. buckwheat	Polygonaceae	<i>Polygonum</i>	<i>convolvulus</i>	buckwheat
W. mustard	Brassicaceae	<i>Sinapis</i>	<i>arvensis</i>	mustard
W. oat	Poaceae	<i>Avena</i>	<i>fatua</i>	grass
Waterhemp	Amaranthaceae	<i>Amaranthus</i>	<i>tuberculatus</i>	amaranth

Winter mustard	Brassicaceae	<i>Many species</i>		mustard
Yellow foxtail	Poaceae	<i>Setaria</i>	<i>pumila</i>	grass

Table 3. Cover crop scientific name and common classification

Cover crop	Family	Genus	Species	Common name
Alfalfa	Fabaceae	<i>Medicago</i>	<i>sativa</i>	legume
Alkaligrass	Poaceae	<i>Puccinellia</i>		grass
Amaranth	Amaranthaceae	<i>Amaranthus</i>		amaranth
Annual fescue	Poaceae	<i>Vulpia</i>	<i>myuros</i>	grass
Barley	Poaceae	<i>Hordeum</i>	<i>vulgare</i>	grass
Beet	Chenopodiaceae	<i>Beta</i>	<i>vulgaris</i>	goosefoot
Berseem clover	Fabaceae	<i>Trifolium</i>	<i>alexandrinum</i>	legume
Birdsfoot trefoil	Fabaceae	<i>Lotus</i>	<i>corniculatus</i>	legume
Buckwheat	Polygonaceae	<i>Fagopyrum</i>	<i>esculentum</i>	buckwheat
Camelina	Brassicaceae	<i>Camelina</i>	<i>sativa</i>	mustard
Canola	Brassicaceae	<i>Brassica</i>	<i>napus</i>	mustard
Carrot	Apiaceae	<i>Daucus</i>	<i>carota</i>	parsley
Cereal rye	Poaceae	<i>Secale</i>	<i>cereale</i>	grass
Chard	Chenopodiaceae	<i>Beta</i>	<i>vulgaris</i>	goosefoot
Chickpea	Fabaceae	<i>Cicer</i>	<i>arietinum</i>	legume
Chicory	Asteraceae	<i>Cichorium</i>	<i>intybus</i>	composite
Cluster bean	Fabaceae	<i>Cyamopsis</i>	<i>tetragonoloba</i>	legume
Corn	Poaceae	<i>Zea</i>	<i>mays</i>	grass
Cowpea	Fabaceae	<i>Vigna</i>	<i>unguiculata</i>	legume
Crimson clover	Fabaceae	<i>Trifolium</i>	<i>incarnatum</i>	legume
Cucumber/squash	Cucurbitaceae	<i>Cucurbita</i>		cucurbit
Fava Bean	Fabaceae	<i>Vicia</i>	<i>faba</i>	legume
Fenugreek	Fabaceae	<i>Trigonella</i>		legume
Field pea	Fabaceae	<i>Pisum</i>	<i>sativum</i>	legume
Flax	Linacea	<i>Linum</i>	<i>usitatissimum</i>	cosmopolitan
Foxtail millet	Poaceae	<i>Setaria</i>	<i>italica</i>	grass
Grain sorghum	Poaceae	<i>Sorghum</i>	<i>bicolor</i>	grass
Intermediate wheatgr.	Poaceae	<i>Thinopyrum</i>	<i>intermedium</i>	grass
Kale	Brassicaceae	<i>Brassica</i>	<i>napus</i>	mustard
Kura clover	Fabaceae	<i>Trifolium</i>	<i>ambiguum</i>	legume
Lentil	Fabaceae	<i>Lens</i>	<i>culinaris</i>	legume
Lupin	Fabaceae	<i>Lupinus</i>		legume
Medic	Fabaceae	<i>Medicago</i>		legume
Mung bean	Fabaceae	<i>Vigna</i>	<i>radiata</i>	legume
Mustard	Brassicaceae	<i>Brassica</i>		mustard
Oat	Poaceae	<i>Avean</i>	<i>sativa</i>	grass
Peanut	Fabaceae	<i>Arachis</i>	<i>hypogaea</i>	legume
Pearl millet	Poaceae	<i>Pennisetum</i>	<i>glaucum</i>	grass
Phacelia	Boraginaceae	<i>Phacelia</i>	<i>tanacetifolia</i>	borage
Pigeonpea	Fabaceae	<i>Cajanus</i>	<i>cajan</i>	legume
Proso millet	Poaceae	<i>Panicum</i>	<i>milaceum</i>	grass
Quinoa	Chenopodiaceae	<i>Chenopodium</i>	<i>quinoa</i>	goosefoot
Radish	Brassicaceae	<i>Raphanus</i>	<i>sativus</i>	mustard

Red clover Fabaceae *Trifolium* *pratense* legume

Table 3. Cover crop scientific name and common classification continued

Cover crop	Family	Genus	Species	Common name
Roundhead lespedza	Fabaceae	<i>Lespedeza</i>	<i>capitata</i>	legume
Russian wildrye	Poaceae	<i>Psathyrostachys</i>	<i>juniceus</i>	grass
Safflower	Asteraceae	<i>Carthamus</i>	<i>tinctorius</i>	composite
Sainfoin	Fabaceae	<i>Onobrychis</i>	<i>viciifolia</i>	legume
Slender wheatgrass	Poaceae	<i>Elymus</i>	<i>trachycaulus</i>	grass
Soybean	Fabaceae	<i>Glycine</i>	<i>max</i>	legume
Spinach	Chenopodiaceae	<i>Spinacia</i>	<i>oleracea</i>	amaranth
Sudan grass	Poaceae	<i>Sorghum</i>	<i>bicolor</i>	grass
Sunflower	Asteraceae	<i>Helianthus</i>	<i>annuus</i>	composite
Sunnhemp	Fabaceae	<i>Crotalaria</i>	<i>juncea</i>	legume
Sweetclover	Fabaceae	<i>Melilotus</i>		legume
Tall wheatgrass	Poaceae	<i>Thinopyrum</i>	<i>ponticum</i>	grass
Teff	Poaceae	<i>Eragrostis</i>	<i>tef</i>	grass
Triticale	Poaceae	<i>Triticale</i>	<i>hexaploide</i>	grass
Turnip	Brassicaceae	<i>Brassica</i>	<i>rapa</i>	mustard
Vetch	Fabaceae	<i>Vicia</i>		legume
Wheat	Poaceae	<i>Triticum</i>	<i>aestivum</i>	grass
Wheatgrass	Poaceae	<i>Elymus</i>	<i>hoffmannii</i>	grass
White clover	Fabaceae	<i>Trifolium</i>	<i>repens</i>	legume

Table 4. General expectations of residual weed control

These ratings are based on my personal experience

These times will vary by herbicide, weather and soil parameters use with caution

Refer to label for more information

USE AT YOU OWN RISK

ALWAYS READ AND FOLLOW LABEL

Site of Action	Group	Common timing	Expected residual control
ACC-ase	1	POST	Days to 1 week
ALS	2	PRE-POST	Days to years
DNA	3	PRE-EPOST	2-4 weeks
Growth Regulator	4	POST	Days to 2 weeks
Photo II site A	5	PRE-EPOST	1-3 weeks
Photo II site B	6	POST	Days
Lipid synthesis	8	PRE	1-3 weeks
EPSP (Roundup)	9	PRE-POST	None
Glutamine (Liberty)	10	POST	None
PPO	14	PRE-POST	Days-4 weeks
VLCFA	15	PRE-EPOST	1-4 weeks
Auxin Inhibitor	19	POST	Days-1 week
Photo I	22	POST-PREHARVEST	None
Bleaching: HPPD	27	PRE-EPOST	1-4 weeks