

TABLE 6B – Potato Herbicides – Remarks and Limitations

Potatoes – Preplant Incorporated Only

Weed Controlled	Herbicide	Rate lb/A a.i.	Formulation/A	Remarks and Limitations
Annual grasses	EPTC (<i>Eptam</i>)	4	4.5 pt 7EC	<ul style="list-style-type: none"> • Apply preplant incorporated only. • Refer to Table 6A for weed control and crop tolerance ratings. • Work into soil immediately after application. • Increase the rate to 6.75 pt/A for nutsedge control. • DO NOT exceed 14 pt/A <i>Eptam</i> per crop. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.
	ethalfluralin (<i>Sonalan HFP</i>)	0.75	2 pt 3L	<ul style="list-style-type: none"> • Apply preplant incorporated only. • Refer to Table 6A for weed control and crop tolerance ratings. • Work into soil immediately after application. • <i>Sonalan HFP</i> rates range from 1.33-2 pt/A (coarse textured soils), 2-2.66 pt/A (medium textured soils), and 2.66 pt/A (fine textured soils). • DO NOT exceed 2.66 pt/A per year. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to Table 12 for crop rotation restrictions.

Potatoes – Soil Applied Herbicides

Weed Controlled	Herbicide	Rate lb/A a.i.	Formulation/A	Remarks and Limitations
Annual grasses	s-metolachlor (<i>Dual Magnum</i>) OR (<i>Dual II Magnum, Cinch</i>)	1.27	1.33 pt 7.62EC OR 1.33 pt 7.64EC	<ul style="list-style-type: none"> • Apply preplant incorporated or preemergence following planting, hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • Can be tank mixed with other soil-applied herbicides for improved control of certain weeds. • Can be applied postemergence after hilling or drag-off, but this application will not control emerged weeds. • DO NOT apply more than 3.6 pt/A per year. • DO NOT use on muck or peat soils. • DO NOT harvest potatoes within 60 days of preemergence application and 40 days of postemergence applications. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.
	dimethenamid-P (<i>Outlook</i>)	0.66	14 oz 6L	<ul style="list-style-type: none"> • Apply preemergence following planting, hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • <i>Outlook</i> rates range from 12 to 18 oz/A (coarse textured soils) and 18 to 21 oz/A (medium- to fine-textured soils). • DO NOT incorporate. • DO NOT apply more than one application of <i>Outlook</i> per acre per year. • Under cold or wet conditions, applications of <i>Outlook</i> may result in delayed emergence or early season stunting. • DO NOT apply within 40 days of potato harvest. • Tank mixtures and/or sequential program are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.

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Potatoes – Soil Applied Herbicides (continued)

Weed Controlled	Herbicide	Rate lb/A a.i.	Formulation/A	Remarks and Limitations
<i>(continued)</i>				
Annual grasses	metolachlor (Parallel)	1.3	1.33 pt 7.8EC	<ul style="list-style-type: none"> • Apply preplant incorporated or preemergence following planting, hilling or drag-off. • <i>Parallel</i> contains the R and S-isomers of metolachlor. Rates would need to be increased to 2 pt/A to provide the same amount of s-metolachlor (the more active isomer) as the 1.33 pt/A rate of <i>Dual Magnum</i>. • Refer to the Remarks and Limitations section for <i>Dual Magnum</i>.
	pendimethalin (Prowl H ₂ O) OR (Prowl)	0.75	1.6 pt 3.8CS OR 1.8 pt 3.3EC	<ul style="list-style-type: none"> • Apply preemergence following planting, hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • Can be tank mixed with other soil-applied herbicides for improved control of certain weeds. • Can be applied early postemergence to the 6-inch stage of growth, but this application will not control emerged weeds. • DO NOT apply more than one application of <i>Prowl H₂O</i>/<i>Prowl</i> per acre per year. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.
	glyphosate + s-metolachlor (Sequence) + ammonium sulfate	1.64	3.5 pt 2.25L + 17 lb/100 gal	<ul style="list-style-type: none"> • Apply preemergence following planting, hilling or drag-off. • <i>Sequence</i> at 3.5 pt/A contains 0.9 lb a.e./A of glyphosate and 1.2 pt/A of <i>Dual Magnum</i>. • DO NOT apply to emerged potatoes – severe injury will occur. • Refer to Table 6A for residual weed control and crop tolerance ratings. • DO NOT apply more than 4 pt/A per season. • DO NOT apply within 60 days of potato harvest. • Refer to label and Table 12 for crop rotation restrictions.
	pyroxasulfone (Zidua SC)	0.081	2.5 oz 4.17SC	<ul style="list-style-type: none"> • Apply preemergence following planting, hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • Can be tank mixed with other soil-applied herbicides for improved control of certain weeds. • There should always be at least 2 inches of soil between the seed pieces/new shoots and the herbicide to avoid crop injury. • Application rate varies with soil texture from 2.5 to 3.25 oz/A. • DO NOT apply more than 2.5 oz/A on coarse or 3.25 on medium and fine textured soils of <i>Zidua SC</i>. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to Table 12 for crop rotation restrictions.
Annual broadleaves	linuron (Lorox DF) OR (Linex 4L)	0.75	1.5 lb 50DF OR 1.5 pt 4L	<ul style="list-style-type: none"> • Apply preemergence immediately after hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • Apply before grasses exceed 2 inches and broadleaves exceed 6 inches tall, but BEFORE POTATOES EMERGE – surfactant at 0.125% v/v can be added. • <i>Lorox/Linex</i> should be tank mixed with a soil-applied grass herbicide, such as <i>Dual Magnum</i> for control of grass weeds. • <i>Lorox/Linex</i> will provide some control of triazine-resistant common lambsquarters. • DO NOT exceed 3 pt/A per acre per crop season. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.

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Potatoes – Soil Applied Herbicides (continued)

Weed Controlled	Herbicide	Rate lb/A a.i.	Formulation/A	Remarks and Limitations
<i>(continued)</i>				
Annual broadleaves	rimsulfuron (<i>Matrix SG</i>)	0.023	1.5 oz 25WG	<ul style="list-style-type: none"> • Apply preemergence immediately after hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • Rainfall or irrigation of 1/3 to 1 inch is needed within 5 days of application to achieve the greatest activity. • <i>Matrix</i> may be tank mixed with other soil-applied herbicides for improved control of certain weeds. • DO NOT exceed 2.5 oz/A per acre per crop season. • DO NOT apply <i>Matrix</i> within 30 days of potato harvest. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.
	metribuzin (<i>Metribuzin</i> , others)	0.5	0.67 lb 75DF	<ul style="list-style-type: none"> • Apply preemergence immediately after hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • Under adverse weather conditions (cool-wet) – crop injury can occur and may be more pronounced with specific varieties. • <i>Metribuzin</i> may be tank mixed with other soil-applied herbicides for improved control of certain weeds. • <i>Metribuzin</i> will not provide control of triazine-resistant common lambsquarters. • Can be applied in split-applications (once preemergence and once postemergence). • DO NOT exceed 1.33 lb/A per acre per crop season. • DO NOT apply within 60 days of potato harvest. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.
	fomesafen (<i>Reflex</i>)	0.25	1 pt 2L	<ul style="list-style-type: none"> • Apply preemergence following planting, hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • DO NOT apply to emerged potato plants – severe crop injury will occur. • Potato varieties may vary in their response to <i>Reflex</i> – consult seed company. • <i>Reflex</i> may be tank mixed with other soil-applied herbicides for improved control of certain weeds. • DO NOT apply <i>Reflex</i> to the same field in consecutive years. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.
Annual grasses Annual broadleaves	s-metolachlor + metribuzin (<i>Boundary 6.5EC</i>)	1.22	1.5 pt 6.5EC	<ul style="list-style-type: none"> • Apply preemergence following planting, hilling or drag-off. • Refer to Table 6A for weed control and crop tolerance ratings. • <i>Boundary 6.5EC</i> at 1.5 pt/A contains 1 pt/A <i>Dual Magnum</i> + 5 oz/A <i>Metribuzin</i>. • Potato varieties can vary in their response to <i>Metribuzin</i> – consult seed company. • <i>Boundary 6.5EC</i> may be tank mixed with other soil-applied herbicides for improved control of certain weeds. • DO NOT apply more than 1 lb a.i./A per year of metribuzin. • DO NOT use on muck or peat soils. • DO NOT apply <i>Boundary 6.5EC</i> within 60 days of potato harvest. • Tank mixtures and/or sequential program are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.

Potatoes – Postemergence Herbicides

Weed Controlled	Herbicide	Rate lb/A a.i.	Formulation/A	Remarks and Limitations
Annual grasses Volunteer cereals	sethoxydim (<i>Poast</i>) + crop oil concentrate	0.19	1 pt 1.5SC + 1 qt	<ul style="list-style-type: none"> • Refer to Table 6A for weed control and crop tolerance ratings. • Apply to grasses up to 8 inches tall (crabgrass up to 6 inches). • <i>Poast</i> at 0.75 pt/A will control 1 to 4 inch tall barnyardgrass, green and giant foxtails, and fall panicum. • Volunteer cereals need to be treated before tillering (up to 4 inches tall). • DO NOT apply within 30 days of potato harvest. • Refer to label and Table 12 for crop rotation restrictions.
	clethodim (<i>Select Max</i>) OR (<i>Select/Arrow</i>) + crop oil concentrate	0.068 0.094	9 oz 0.97EC OR 6 oz 2EC + 1%	<ul style="list-style-type: none"> • Refer to Table 6A for weed control and crop tolerance ratings. • Apply to grasses up to 8 inches tall (crabgrass up to 6 inches). • <i>Select Max</i> at 6 oz/A or <i>Select/Arrow</i> at 4 oz/A will control 1 to 4 inch tall barnyardgrass, green and giant foxtails, and fall panicum. • Volunteer cereals need to be treated between 2 to 6 inches tall. • The addition of ammonium sulfate (2.5 to 4 lb/A) has been shown to improve control of difficult weeds – e.g., quackgrass, Johnsongrass, and volunteer cereals. • There is more adjuvant flexibility with <i>Select Max</i> tank-mixtures. Consult label. • DO NOT apply within 30 days of potato harvest. • Refer to label and Table 12 for crop rotation restrictions.
Annual grasses Annual broadleaves	rimsulfuron (<i>Matrix SG</i>) + surfactant	0.016	1 oz 25WG + 0.25%	<ul style="list-style-type: none"> • Refer to Table 6A for weed control and crop tolerance ratings. • Apply to small weeds (<1 inch in height or diameter). • <i>Matrix</i> may cause some temporary yellowing. • <i>Matrix</i> can be tank mixed with <i>Metribuzin</i> at 0.25 to 0.67 lb/A for improved control of certain weeds – apply with 0.125% v/v non-ionic surfactant. Refer to the remarks and limitations section for <i>Metribuzin</i>. • Apply at 1.5 oz/A for quackgrass control (4-8 inches tall). • DO NOT exceed 2.5 oz/A per acre per crop season. • DO NOT apply <i>Matrix</i> within 30 days of potato harvest. • Refer to label and Table 12 for crop rotation restrictions.
	metribuzin (<i>Metribuzin</i> , others)	0.25	0.33 lb 75DF	<ul style="list-style-type: none"> • Refer to Table 6A for weed control and crop tolerance ratings. • Apply to small weeds (<1 inch in height or diameter). • NOT RECOMMENDED on early maturing smooth skinned white and all red skinned varieties. Atlantic, Bellchip, Centennial, Chipbelle, Shepody, and Superior varieties are all sensitive to postemergence applications of metribuzin. • <i>Metribuzin</i> can be tank mixed with (<i>Matrix</i>) at 1 oz/A for improved control of certain weeds – apply with 0.125% v/v non-ionic surfactant. • <i>Metribuzin</i> will not provide control of triazine-resistant common lambsquarters. • Can be applied in split-applications (once preemergence and once postemergence). • DO NOT exceed 1.33 lb/A per acre per crop season. • DO NOT apply within 60 days of potato harvest. • Tank mixtures and/or sequential programs are needed for a complete weed control program. • Refer to label and Table 12 for crop rotation restrictions.

TABLE 6C – Vine Desiccation in Potatoes

Weed Controlled	Herbicide	Rate lb/A a.i.	Formulation/A	Remarks and Limitations
Potato Vine Desiccation	carfentrazone (<i>Aim</i>) + methylated seed oil	0.047	3.2 oz 2EC + 1%	<ul style="list-style-type: none"> • Apply from 3.2 to 5.8 oz/A for best results. • Crop oil concentrate (1%) or surfactant (0.25%) may be used instead of methylated seed oil. • DO NOT apply more than 11.6 oz/A per year. • <i>Aim</i> is not as effective as <i>Reglone</i> or <i>Rely</i>. • Sequential applications may be needed — thorough coverage is required. • DO NOT harvest within 7 days of application.
	diquat (<i>Reglone</i>) + surfactant	0.25–0.5	1–2 pt 2L + 0.25%	<ul style="list-style-type: none"> • Make a second application of 1-2 pt/A a minimum of 5 days later if vine growth is dense. • A total of 4 pt/A may be applied, with no more than 2 pt/A at a single application. Allow 5 days between applications. • Apply at 50 psi or less in 20-100 gal. clean water/A. Greater water volumes will provide more thorough coverage of heavy vine growth. • Apply at least 7 days before harvest. • DO NOT apply to drought-stressed potatoes. • No soil persistence. A cover crop can be planted immediately.
	glufosinate (<i>Rely</i>) + ammonium sulfate	0.375	21 oz 2.34L + 17 lb/100 gal	<ul style="list-style-type: none"> • DO NOT use to desiccate potatoes that are being used for seed. • Apply at a total volume of 20-100 gal. water/A with ground equipment. • Increase spray volume to at least 30 gal. water/A when the potato vine canopy is dense or under cool and dry conditions. • Requires a rainfree period for 4 hours after application. • DO NOT make more than one application per harvest. • Apply at least 9 days before harvest.
	pyraflufen ethyl (<i>Vida</i>) + crop oil concentrate	0.009	5.5 oz 0.21EC + 1%	<ul style="list-style-type: none"> • Apply from 2.5 to 5.5 oz/A for best results. • <i>Vida</i> is not as effective as <i>Reglone</i> or <i>Rely</i>. • Use an approved agricultural buffering agent buffering to pH 7.5 or less if using <i>Vida</i> in a water source of > pH 7.5. • A total of 11 oz/A may be applied, with no more than 5.5 oz/A at a single application. Allow 7 days between applications. • Make a second application a minimum of 7 days later if vine growth is dense. • Tank mixing or sequential applications with other vine desiccation products result in enhanced control. • Apply in 20 to 50 gal water/A with ground equipment. • Apply at least 7 days before harvest.