

# TABLE 6A – Chemical Weed Control in Potatoes

## Potatoes – Preplant Followed by Delayed Preemergence

| Weed Controlled   | Herbicide                             | Rate lb/A<br>a.i. | Formulation/A              | Remarks and Limitations  |
|---|---------------------------------------|-------------------|----------------------------|--|
| <b>Annual grasses,<br/>Annual broadleaves<br/>Preplant incorporated</b> | EPTC<br>( <i>Eptam</i> )              | 4                 | 4.5 pt 7EC                 | <ul style="list-style-type: none"> <li>• Work into soil immediately after application.</li> <li>• Use 6.75 pt/A if nutsedge is a problem.</li> <li>• Preplant incorporated.</li> </ul>   |
| <b>FOLLOWED BY<br/>Delayed preemergence</b>                             | linuron<br>( <i>Lorox/Linex</i> )     | 1                 | 1 qt 4L<br>OR<br>2 lb 50DF | <ul style="list-style-type: none"> <li>• These treatments follow <i>Eptam</i> preplant incorporated.</li> <li>• Delayed preemergence.</li> <li>• Treatment should be made prior to potato emergence and to germinating weeds or weeds that have emerged but are very small.</li> <li>• If small weeds have emerged, add non-ionic surfactant at 0.125% (1 pt/100 gal. water).</li> <li>• A preemergence application of metribuzin to Atlantic and and Shepody varieties is not recommended because injury can occur, especially under adverse weather conditions and when high metribuzin rates are used.</li> <li>• DO NOT use <i>Matrix</i> preemergence on soils with greater than 6% organic matter.</li> <li>• Adding <i>Matrix</i> will provide additional annual grass and redroot pigweed control and will suppress cocklebur.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul> |
|   | OR<br>metribuzin<br>( <i>Sencor</i> ) | 0.5               | OR<br>0.67 lb 75DF         |  |
|   | +<br>rimsulfuron<br>( <i>Matrix</i> ) | +<br>0.024        | +<br>1.5 oz 25DF           |  |

## Potatoes – Early Preemergence Followed by Delayed Preemergence

| Weed Controlled   | Herbicide  | Rate lb/A<br>a.i. | Formulation/A        | Remarks and Limitations   |
|---|--|-------------------|----------------------|---|
| <b>Annual grasses<br/>(especially<br/>barnyardgrass)<br/>Early preemergence</b> | s-metolachlor<br>( <i>Dual Magnum,<br/>Dual II Magnum</i> )          | 1.27              | 1.33 pt 7.64EC       | <ul style="list-style-type: none"> <li>• Apply <b>early preemergence</b> – make application soon after planting.</li> <li>• If field leveling is necessary, it should be done soon after planting.</li> <li>• Most effective on germinating grasses that have not emerged.</li> <li>• <b>Advisory statement:</b> <i>Stalwart/Parallel/Parallel PCS</i> is a mix of the R and S-isomers of metolachlor. Limited research has shown that <i>Stalwart/Parallel/Parallel PCS</i> at 1.33 pt/A provides similar activity to <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. However, <i>Stalwart/Parallel/Parallel PCS</i> may not provide the consistency, length of control or performance on more difficult to control weeds when compared with <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. <i>Stalwart/Parallel/Parallel PCS</i> rates would need to be increased to 2.0 pt/A to provide the same amount of s-metolachlor (the more active isomer) at the 1.33 pt/A rate of <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor).</li> <li>• DO NOT use <i>Prowl/Prowl H<sub>2</sub>O/Pendimax</i> on muck soils or loamy sands with less than 1.5% organic matter.</li> <li>• <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).</li> <li>• Under cold or wet conditions, applications of <i>Outlook</i> may result in delayed emergence or early season stunting.</li> <li>• Follow with <i>Sencor</i>, or <i>Lorox/Linex</i>, or <i>Sencor</i> plus <i>Matrix</i>.</li> </ul> |
|   | OR<br>metolachlor<br>( <i>Parallel,<br/>Parallel PCS, Stalwart</i> ) | 1.3               | OR<br>1.33 pt 7.8EC  |   |
|   | OR<br>pendimethalin<br>( <i>Prowl/Pendimax</i> )                     | 0.75              | OR<br>1.8 pt 3.3EC   |   |
|   | OR<br>( <i>Prowl H<sub>2</sub>O</i> )                                |                   | OR<br>1.6 pt 3.8 ACS |   |
|   | OR<br>dimethenamid-P<br>( <i>Outlook</i> )                           | 0.66              | OR<br>14 oz 6L       |   |

(Continued on next page)

## Potatoes – Early Preemergence Followed by Delayed Preemergence (continued)

| Weed Controlled             | Herbicide                    | Rate lb/A<br>a.i. | Formulation/A              | Remarks and Limitations   |
|-----------------------------|------------------------------|-------------------|----------------------------|---|
| <i>(continued)</i>          |                              |                   |                            |   |
| FOLLOWED BY:                |                              |                   |                            |   |
| <b>Delayed preemergence</b> | linuron<br>(Lorox/Linex)     | 1                 | 1 qt 4L<br>OR<br>2 lb 50DF | <ul style="list-style-type: none"> <li>• Delayed preemergence.</li> <li>• These treatments follow <i>Prowl/Prowl H<sub>2</sub>O/Pendimax</i> or <i>Dual Magnum</i> or <i>Parallel/Stalwart</i> or <i>Outlook</i> early preemergence.</li> <li>• Apply before potato emergence.</li> <li>• Most effective on germinating and small emerged weeds.</li> <li>• If small weeds have emerged, add non-ionic surfactant at 0.125% (1 pt/100 gal. water).</li> <li>• A preemergence application of metribuzin to Atlantic or Shepody varieties is not recommended because injury can occur, especially under adverse weather conditions and where high metribuzin rates are used.</li> <li>• DO NOT use <i>Matrix</i> preemergence on soils with greater than 6% organic matter.</li> <li>• Adding <i>Matrix</i> will provide additional annual grass and redroot pigweed control and will suppress cocklebur.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul> |
|                             | OR<br>metribuzin<br>(Sencor) | 0.5               | 0.67 lb 75DF               |   |
|                             | +<br>rimsulfuron<br>(Matrix) | +<br>0.024        | +<br>1.5 oz 25DF           |   |

## Potatoes – Delayed Preemergence

| Weed Controlled  | Herbicide  | Rate lb/A<br>a.i. | Formulation/A                | Remarks and Limitations   |
|--|--|-------------------|------------------------------|---|
| <b>Annual broadleaves,<br/>Annual grasses,<br/>Yellow nutsedge</b> | linuron<br>(Lorox/Linex)                                   | 1.5               | 1.5 qt 4L<br>OR<br>3 lb 50DF | <ul style="list-style-type: none"> <li>• If field leveling is necessary, it should be done soon after planting to allow weed emergence before spraying.</li> <li>• Apply delayed preemergence before grasses are 2 inches and broadleaves are 4 inches, but BEFORE POTATOES EMERGE.</li> <li>• On soils with greater than 5% organic matter, apply 2 lb a.i./A of linuron to emerged weeds.</li> <li>• <b>Advisory statement:</b> <i>Stalwart/Parallel/Parallel PCS</i> is a mix of the R and S-isomers of metolachlor. Limited research has shown that <i>Stalwart/Parallel/Parallel PCS</i> at 1.33 pt/A provides similar activity to <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. However, <i>Stalwart/Parallel/Parallel PCS</i> may not provide the consistency, length of control or performance on more difficult to control weeds when compared with <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. <i>Stalwart/Parallel/Parallel PCS</i> rates would need to be increased to 2.0 pt/A to provide the same amount of s-metolachlor (the more active isomer) at the 1.33 pt/A rate of <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor).</li> <li>• <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).</li> <li>• Under cold or wet conditions, applications of <i>Outlook</i> may result in delayed emergence or early season stunting.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul> |
|  | +<br>s-metolachlor<br>(Dual Magnum,<br>Dual II Magnum)     | +<br>1.27         | +<br>1.33 pt 7.64EC          |   |
|  | OR<br>metolachlor<br>(Parallel,<br>Parallel PCS, Stalwart) | 1.3               | OR<br>1.33 pt 7.8EC          |   |
|  | OR<br>dimethenamid-P<br>(Outlook)                          | 0.66              | OR<br>14 oz 6L               |   |

*(Continued on next page)*

## Potatoes – Delayed Preemergence (continued)

| Weed Controlled  | Herbicide  | Rate lb/A<br>a.i. | Formulation/A  | Remarks and Limitations   |
|--|--|-------------------|----------------|---|
| <i>(continued)</i>   |  |                   |                |   |
| <b>Annual broadleaves,<br/>Annual grasses,<br/>Yellow nutsedge</b> | metribuzin<br>( <i>Sencor</i> )                                | 0.5               | 0.67 lb 75DF   | <ul style="list-style-type: none"> <li>• If field leveling is necessary, it should be done soon after planting to allow weed emergence before spraying.</li> <li>• Apply delayed preemergence before weeds are 1 inch and before potatoes emerge.</li> <li>• Use up to 1 lb a.i. of metribuzin/A on high organic (muck) soil.</li> <li>• A preemergence application of metribuzin to Atlantic or Shepody varieties is not recommended because injury can occur, especially under adverse weather conditions and where high metribuzin rates are used.</li> <li>• <b>Advisory statement:</b> <i>Stalwart/Parallel/Parallel PCS</i> is a mix of the R and S-isomers of metolachlor. Limited research has shown that <i>Stalwart/Parallel/Parallel PCS</i> at 1.33 pt/A provides similar activity to <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. However, <i>Stalwart/Parallel/Parallel PCS</i> may not provide the consistency, length of control or performance on more difficult to control weeds when compared with <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. <i>Stalwart/Parallel/Parallel PCS</i> rates would need to be increased to 2.0 pt/A to provide the same amount of s-metolachlor (the more active isomer) at the 1.33 pt/A rate of <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor).</li> <li>• <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).</li> <li>• Under cold or wet conditions, applications of <i>Outlook</i> may result in delayed emergence or early season stunting.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul>   |
|  | +  | +                 | +              |   |
|  | s-metolachlor<br>( <i>Dual Magnum,<br/>Dual II Magnum</i> )    | 1.27              | 1.33 pt 7.64EC |   |
|  | OR   |                   | OR             |   |
|  | metolachlor<br>( <i>Parallel,<br/>Parallel PCS, Stalwart</i> ) | 1.3               | 1.33 pt 7.8EC  |   |
|  | OR   |                   | OR             |   |
|  | dimethenamid-P<br>( <i>Outlook</i> )                           | 0.66              | 14 oz 6L       |   |
|  | metribuzin<br>( <i>Sencor</i> )                                | 0.5               | 0.67 lb 75DF   | <ul style="list-style-type: none"> <li>• If field leveling is necessary, it should be done soon after planting to allow weed emergence before spraying.</li> <li>• Apply delayed preemergence before weeds are 1 inch tall and before potatoes emerge.</li> <li>• A preemergence application of metribuzin to Atlantic or Shepody varieties is not recommended because injury can occur, especially under adverse weather conditions and where high metribuzin rates are used.</li> <li>• DO NOT use <i>Matrix</i> preemergence on soils with greater than 6% organic matter.</li> <li>• Adding <i>Matrix</i> will provide additional annual grass and redroot pigweed control and will suppress cocklebur.</li> <li>• <b>Advisory statement:</b> <i>Stalwart/Parallel/Parallel PCS</i> is a mix of the R and S-isomers of metolachlor. Limited research has shown that <i>Stalwart/Parallel/Parallel PCS</i> at 1.33 pt/A provides similar activity to <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. However, <i>Stalwart/Parallel/Parallel PCS</i> may not provide the consistency, length of control or performance on more difficult to control weeds when compared with <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. <i>Stalwart/Parallel/Parallel PCS</i> rates would need to be increased to 2.0 pt/A to provide the same amount of s-metolachlor (the more active isomer) at the 1.33 pt/A rate of <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor).</li> <li>• <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).</li> <li>• Under cold or wet conditions, applications of <i>Outlook</i> may result in delayed emergence or early season stunting.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul> |
| +  | +  | +                 |                |   |
| rimsulfuron<br>( <i>Matrix</i> )                                   | 0.024  | 1.5 oz 25DF       |                |   |
| OR   |  | OR                |                |   |
|  | s-metolachlor<br>( <i>Dual Magnum,<br/>Dual II Magnum</i> )    | 1.27              | 1.33 pt 7.64EC |   |
|  | OR   |                   | OR             |   |
|  | metolachlor<br>( <i>Parallel,<br/>Parallel PCS, Stalwart</i> ) | 1.3               | 1.33 pt 7.8EC  |   |
|  | OR   |                   | OR             |   |
|  | dimethenamid-P<br>( <i>Outlook</i> )                           | 0.66              | 14 oz 6L       |   |

## Potatoes – Postemergence

| Weed Controlled  | Herbicide   | Rate lb/A<br>a.i.                | Formulation/A  | Remarks and Limitations  |
|--|---|----------------------------------|--|--|
| <b>Annual broadleaves,<br/>Annual grasses</b>                | metribuzin<br>( <i>Sencor</i> )   | 0.25                             | 0.33 lb 75DF   | <ul style="list-style-type: none"> <li>• DO NOT apply postemergence within 3 days after periods of cool, wet or cloudy weather — crop injury may occur.</li> <li>• Treat when weeds are less than 1 inch tall.</li> <li>• Greater possibility of injury to potatoes when sprayed at 12-15 inches.</li> <li>• Not recommended on Atlantic, Shepody, Chip Belle, Bell Chip, or Centennial varieties.</li> <li>• Not recommended for early-maturing varieties such as Superior.</li> <li>• Not recommended for red-skinned varieties.</li> <li>• DO NOT apply postemergence within 60 days of harvest.</li> <li>• Metribuzin at 0.33 lb DF/A can be tank mixed with <i>Poast</i> for annual grass and broadleaf weed control on russet or white-skinned potatoes that are NOT early-maturing. See <i>Poast</i> remarks for the recommended rate. Crop injury may occur.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul>   |
| <b>Annual broadleaves,<br/>Annual grasses</b>                | metribuzin<br>( <i>Sencor</i> )<br>+<br>rimsulfuron<br>( <i>Matrix</i> )<br>+<br>non-ionic surfactant   | 0.25<br>+<br>0.0156              | 0.33 lb 75DF<br>+<br>1 oz 25DF<br>+<br>0.125%                      | <ul style="list-style-type: none"> <li>• DO NOT apply postemergence within 3 days after periods of cool, wet, or cloudy weather or crop injury may occur.</li> <li>• Treat when weeds are less than 1 inch tall.</li> <li>• Greater possibility of injury to potatoes when sprayed at 12-15 inches.</li> <li>• Not recommended on Atlantic, Shepody, Chip Belle, Bell Chip, or Centennial varieties.</li> <li>• Not recommended for early-maturing varieties such as Superior.</li> <li>• Not recommended for red-skinned varieties.</li> <li>• DO NOT apply postemergence within 60 days of harvest.</li> <li>• Add non-ionic surfactant at 0.125% (1 pint per 100 gal. water).</li> <li>• <i>Matrix</i> will improve control of annual grasses, redroot pigweed, triazine-resistant lambsquarters, wild buckwheat, and yellow nutsedge and quackgrass.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul>   |
|  | s-metolachlor<br>( <i>Dual Magnum</i> ,<br><i>Dual II Magnum</i> )<br>OR<br>metolachlor<br>( <i>Parallel</i> ,<br><i>Parallel PCS</i> , <i>Stalwart</i> )<br>+<br>metribuzin<br>( <i>Sencor</i> ) | 1.27<br><br><br>1.3<br>+<br>0.25 | 1.33 pt 7.64EC<br><br>OR<br>1.33 pt 7.8EC<br><br>+<br>0.33 lb 75DF | <ul style="list-style-type: none"> <li>• Refer to remarks for metribuzin postemergence.</li> <li>• APPLICATION should be made ONLY as a directed or semi-DIRECTED spray to avoid chlorosis, minor necrosis and leaf distortion.</li> <li>• <b>Advisory statement:</b> <i>Stalwart/Parallel/Parallel PCS</i> is a mix of the R and S-isomers of metolachlor. Limited research has shown that <i>Stalwart/Parallel/Parallel PCS</i> at 1.33 pt/A provides similar activity to <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. However, <i>Stalwart/Parallel/Parallel PCS</i> may not provide the consistency, length of control or performance on more difficult to control weeds when compared with <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. <i>Stalwart/Parallel/Parallel PCS</i> rates would need to be increased to 2.0 pt/A to provide the same amount of s-metolachlor (the more active isomer) at the 1.33 pt/A rate of <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor).</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul> |
| <b>Redroot pigweed,<br/>Wild mustard,<br/>Annual grasses</b> | rimsulfuron<br>( <i>Matrix</i> )<br>+<br>non-ionic surfactant   | 0.0156                           | 1 oz 25DF<br><br>+<br>0.25%  | <ul style="list-style-type: none"> <li>• DO NOT apply postemergence within 60 days of harvest.</li> <li>• DO NOT apply by air.</li> <li>• Apply to small weeds less than 1 inch tall (quackgrass 4–6 inches) that are actively growing.</li> <li>• For control of redroot pigweed, mustard, and annual grasses.</li> <li>• Suppression of wild buckwheat, yellow nutsedge, quackgrass, and volunteer cereals.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul>  |

## Potatoes – Postemergence

| Weed Controlled                           | Herbicide   | Rate lb/A<br>a.i. | Formulation/A          | Remarks and Limitations  |
|---|---|-------------------|------------------------|--|
| <b>Annual grasses<br/>Redroot pigweed</b> | s-metolachlor<br>( <i>Dual Magnum</i> ,<br><i>Dual II Magnum</i> )                  | 1.27              | 1.33 pt 7.64EC         | <ul style="list-style-type: none"> <li>• Will not control emerged weeds.</li> <li>• DO NOT apply within 40 days of harvest.</li> <li>• DO NOT apply to potatoes at green tip (cracking).</li> <li>• <b>Advisory statement:</b> <i>Stalwart/Parallel/Parallel PCS</i> is a mix of the R and S-isomers of metolachlor. Limited research has shown that <i>Stalwart/Parallel/Parallel PCS</i> at 1.33 pt/A provides similar activity to <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. However, <i>Stalwart/Parallel/Parallel PCS</i> may not provide the consistency, length of control or performance on more difficult to control weeds when compared with <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor) at 1.33 pt/A. <i>Stalwart/Parallel/Parallel PCS</i> rates would need to be increased to 2.0 pt/A to provide the same amount of s-metolachlor (the more active isomer) at the 1.33 pt/A rate of <i>Dual Magnum/Dual II Magnum/Cinch</i> (s-metolachlor).</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul>        |
|   | OR<br>metolachlor<br>( <i>Parallel</i> ,<br><i>Parallel PCS</i> , <i>Stalwart</i> ) | 1.3               | OR<br>1.33 pt 7.8EC    |  |
| <b>Annual grasses</b>                     | sethoxydim<br>( <i>Poast</i> )  | 0.19              | 1 pt 1.5SC             | <ul style="list-style-type: none"> <li>• Apply to annual grasses up to 8 inches tall (crabgrass up to 6 inches).</li> <li>• <i>Poast</i> can be reduced to 0.75 pt/A for 1- to 4-inch tall barnyardgrass, green and giant foxtails, and fall panicum.</li> <li>• Do not apply to grasses under stress — poor weed control may result.</li> <li>• Use 5-20 gal. water/A at 40-60 psi.</li> <li>• No soil activity.</li> <li>• Do not cultivate within 5 days prior to and 7 days following application.</li> <li>• Metribuzin at 0.33 lb DF/A can be tank mixed with <i>Poast</i> for annual grass and broadleaf weed control on russet or white-skinned potatoes that are NOT early-maturing. Add crop oil concentrate at 1 qt/A. Crop injury may occur.</li> <li>• If applied separately, wait 1 day after <i>Poast</i> application before applying metribuzin. Wait a minimum of 7 days after metribuzin before applying <i>Poast</i>.</li> <li>• Do not apply within 30 days of harvest.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul>              |
|   | +<br>crop oil concentrate   |                   | +<br>1 qt              |  |
|   | clethodim<br>( <i>Select/Arrow</i> )  | 0.094             | 6 oz 2EC               | <ul style="list-style-type: none"> <li>• Use 10-40 gal. water/A at 20-60 psi.</li> <li>• Apply <i>Select/Arrow</i> only with crop oil concentrate (1% v/v). <i>Select Max</i> offers greater adjuvant flexibility and may be applied with crop oil concentrate (1% v/v), methylated seed oil (1% v/v) or non-ionic surfactant (0.25% v/v).</li> <li>• The addition of ammonium sulfate at 2.5 to 4 lb/A has been shown to improve control of difficult to control weeds — e.g., quackgrass, rhizome Johnsongrass, volunteer cereals and volunteer corn.</li> <li>• DO NOT apply within 30 days of harvest.</li> <li>• DO NOT apply to grasses under stress — poor weed control may result.</li> <li>• Do not cultivate within 7 days prior to and 7 days following application.</li> <li>• <i>Select/Arrow</i> can be reduced to 4 oz/A and <i>Select Max</i> can be reduced to 6 oz/A for barnyardgrass, giant foxtail and fall panicum shorter than 4 inches and volunteer corn shorter than 6 inches.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul> |
|   | +<br>crop oil concentrate<br>OR<br>( <i>Select Max</i> )                            | 0.068             | +<br>OR<br>9 oz 0.97EC |  |
|   | +<br>crop oil concentrate   |                   | +<br>1%                |  |

## Potatoes – Postemergence (continued)

| Weed Controlled          | Herbicide                            | Rate lb/A<br>a.i. | Formulation/A        | Remarks and Limitations   |
|--------------------------|--------------------------------------|-------------------|----------------------|---|
| <b>Quackgrass</b>        | sethoxydim<br>( <i>Poast</i> )       | 0.29 + 0.19       | 1.5 pt + 1 pt 1.5SC  | <ul style="list-style-type: none"> <li>• TWO APPLICATIONS MAY BE NECESSARY FOR QUACKGRASS CONTROL. Make a second application of 1 pt/A 14-21 days following initial treatment. Cultivation may replace second application.</li> <li>• Treat actively growing quackgrass 6-8 inches tall.</li> <li>• See remarks for annual grass control with <i>Poast</i>.</li> </ul>  |
|                          | +<br>crop oil concentrate            |                   | +<br>1 qt + 1 qt     |   |
|                          | +<br>ammonium sulfate                |                   | +<br>2.5 lb + 2.5 lb |   |
|                          | clethodim<br>( <i>Select/Arrow</i> ) | 0.125–0.25        | 8-16 oz 2EC          | <ul style="list-style-type: none"> <li>• TWO APPLICATIONS MAY BE NEEDED FOR BEST QUACKGRASS CONTROL.</li> <li>• Make first application when quackgrass is 6-8 inches tall.</li> <li>• Make second application when quackgrass is 6-8 inches tall.</li> <li>• Make second application 14-21 days later when quackgrass has regrown. Cultivation may replace second application.</li> <li>• Use 10-40 gal. water/A at 20-60 psi.</li> <li>• See remarks for annual grass control with <i>Select</i>.</li> </ul> |
|                          | OR<br>( <i>Select Max</i> )          | 0.09 + 0.09       | OR<br>12 oz 0.97EC   |   |
|                          | +<br>crop oil concentrate            |                   | +<br>1%              |   |
|                          | +<br>ammonium sulfate                |                   | +<br>2.5-4.0 lb      |   |
|                          | rimsulfuron<br>( <i>Matrix</i> )     | 0.0156            | 1 oz 25DF            | <ul style="list-style-type: none"> <li>• Application rate can be increased to 1.5 oz/A.</li> <li>• Apply to quackgrass that is 4-8 inches tall.</li> <li>• Do not apply to quackgrass under stress — poor control may result.</li> <li>• Do not apply within 60 days of harvest.</li> <li>• Do not cultivate for 14 days following application.</li> <li>• Refer to label and Table 12 for crop rotation restrictions.</li> </ul>   |
|                          | +<br>non-ionic surfactant            |                   | +<br>0.25%           |   |
|                          |                                      |                   |                      |   |
| <b>Volunteer cereals</b> | sethoxydim<br>( <i>Poast</i> )       | 0.29              | 1.5 pt 1.5SC         | <ul style="list-style-type: none"> <li>• Apply before tillering (up to 4 inches tall).</li> <li>• See remarks for annual grass control with <i>Poast</i>.</li> <li>• <i>Poast</i> is NOT recommended for spring control of cereals that emerged the previous fall.</li> <li>• See remarks for annual grass control with <i>Poast</i>.</li> </ul>  |
|                          | +<br>crop oil concentrate            |                   | +<br>1 qt            |   |
|                          |                                      |                   |                      |   |
|                          | clethodim<br>( <i>Select/Arrow</i> ) | 0.125             | 8 oz 2EC             | <ul style="list-style-type: none"> <li>• Apply to volunteer cereals between 2-6 inches tall.</li> <li>• See remarks for annual grass control with <i>Select/Arrow</i> and <i>Select Max</i>.</li> </ul>   |
|                          | +<br>crop oil concentrate            |                   | +<br>1%              |   |
|                          | OR<br>( <i>Select Max</i> )          | 0.09              | OR<br>12 oz 0.97EC   |   |
|                          | +<br>crop oil concentrate            |                   | +<br>1%              |   |

# TABLE 6B – Vine Desiccation in Potatoes

| Weed Controlled                | Herbicide   | Rate lb/A<br>a.i. | Formulation/A                         | Remarks and Limitations   |
|--------------------------------|---|-------------------|---------------------------------------|---|
| <b>Potato Vine Desiccation</b> | diquat<br>( <i>Reglone</i> )<br>+<br>surfactant                             | 0.25–0.5          | 1–2 pt 2L<br><br>+<br>0.25%           | <ul style="list-style-type: none"> <li>• Make a second application of 1-2 pt/A a minimum of 5 days later if vine growth is dense.</li> <li>• 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.</li> <li>• 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.</li> <li>• Apply at least 7 days before harvest.</li> <li>• DO NOT apply to drought-stressed potatoes.</li> <li>• No soil persistence. A cover crop can be planted immediately.</li> </ul> |
|                                | endothall<br>( <i>DESICATE II</i> )<br>+<br>ammonium sulfate<br>+<br>LI 700 | 0.75              | 3 pt 2L<br><br>+<br>5 lb<br>+<br>1 pt | <ul style="list-style-type: none"> <li>• DO NOT add LI 700 if temperatures are high and/or the field is moisture stressed.</li> <li>• Increase application rate to 4 pt/A if vine growth is lush and dense, or if weather conditions are cool and cloudy.</li> <li>• Apply at 50 psi or less in 5-40 gal. water/A.</li> <li>• Apply at least 10 days before harvest.</li> </ul>   |
|                                | glufosinate<br>( <i>Rely</i> )<br>+<br>ammonium sulfate                     | 0.375             | 3 pt/A 1L<br><br>+<br>17 lb/100 gal   | <ul style="list-style-type: none"> <li>• DO NOT use to desiccate potatoes that are being used for seed.</li> <li>• Apply at a total volume of 20-100 gal. water/A with ground equipment.</li> <li>• Increase spray volume to at least 30 gal. water/A when the potato vine canopy is dense or under cool and dry conditions.</li> <li>• Requires a rainfree period for 4 hours after application.</li> <li>• DO NOT make more than one application per harvest.</li> <li>• Apply at least 9 days before harvest.</li> </ul>   |
|                                | urea sulfuric acid<br>( <i>Enquik</i> )                                     | –                 | 20 gal                                | <ul style="list-style-type: none"> <li>• <b>DANGER – CORROSIVE. Protective clothing and eyewear required.</b></li> <li>• <b>Special spray equipment required. SEE LABEL.</b></li> <li>• Apply in 20 gal. water/A (total spray volume of 40 gal/A) at 50 psi.</li> <li>• Split applications — 15 gal of <i>Enquik</i>/A in 25 gal of water/A for the first application and repeated 2 days later is suggested for dense vine canopies.</li> </ul>  |

# TABLE 6C – Weed Response to Herbicides in Potatoes\*

| SITE OF ACTION                    | CROP TOLERANCE | ANNUAL BROADLEAVES |            |               |                       |          |                  |           |            |              |                | ANNUAL GRASSES |           |               |               |                |              |            |          | PERENNIALS       |                  |                |            |                 |          |   |   |          |   |   |
|-----------------------------------|----------------|--------------------|------------|---------------|-----------------------|----------|------------------|-----------|------------|--------------|----------------|----------------|-----------|---------------|---------------|----------------|--------------|------------|----------|------------------|------------------|----------------|------------|-----------------|----------|---|---|----------|---|---|
|                                   |                | COCKLEBUR          | JIMSONWEED | LAMBSQUARTERS | NIGHTSHADE (E. BLACK) | PIGWEEED | RAGWEED (COMMON) | SMARTWEED | VELVETLEAF | WILD MUSTARD | WILD BUCKWHEAT | BARNYARDGRASS  | CRABGRASS | GIANT FOXTAIL | GREEN FOXTAIL | YELLOW FOXTAIL | FALL PANICUM | WITCHGRASS | SANDBUR  | BINDWEED (FIELD) | BINDWEED (HEDGE) | CANADA THISTLE | QUACKGRASS | YELLOW NUTSEDGE |          |   |   |          |   |   |
| <b>Preplant Incorporated</b>      |                |                    |            |               |                       |          |                  |           |            |              |                |                |           |               |               |                |              |            |          |                  |                  |                |            |                 |          |   |   |          |   |   |
| EPTAM                             | O              | 1                  | P          | P             | <b>G</b>              | F        | F                | F         | F          | F            | F              | F              | F         | F             | P             | <b>E</b>       | <b>E</b>     | <b>E</b>   | <b>E</b> | <b>E</b>         | <b>E</b>         | <b>E</b>       | <b>E</b>   | <b>E</b>        | <b>G</b> | N | N | N        | F | F |
| <b>Preemergence</b>               |                |                    |            |               |                       |          |                  |           |            |              |                |                |           |               |               |                |              |            |          |                  |                  |                |            |                 |          |   |   |          |   |   |
| DUAL MAGNUM/PARALLEL/<br>STALWART | O              | 2                  | N          | N             | P                     | F        | <b>G</b>         | P         | P          | N            | P              | P              | <b>E</b>  | <b>E</b>      | <b>E</b>      | <b>E</b>       | <b>E</b>     | <b>G</b>   | <b>G</b> | F                | N                | N              | N          | N               | <b>G</b> | N | N | N        | N | F |
| OUTLOOK <sup>a</sup>              | O              | 2                  | N          | N             | P                     | <b>G</b> | <b>G</b>         | P         | P          | N            | P              | P              | <b>E</b>  | <b>E</b>      | <b>E</b>      | <b>E</b>       | <b>E</b>     | <b>G</b>   | <b>G</b> | P                | N                | N              | N          | N               | F        | N | N | N        | N | F |
| SENCOR                            | C              | 2                  | F          | F             | <b>E</b>              | N        | <b>E</b>         | <b>G</b>  | <b>E</b>   | <b>G</b>     | <b>E</b>       | <b>G</b>       | P         | F             | <b>G</b>      | <b>G</b>       | <b>G</b>     | F          | F        | P                | N                | N              | N          | N               | N        | N | N | N        | N | N |
| LOROX/LINEX <sup>b</sup>          | C              | 1                  | P          | P             | <b>G</b>              | F        | <b>G</b>         | <b>G</b>  | <b>G</b>   | F            | <b>G</b>       | F              | F         | F             | F             | F              | F            | P          | N        | N                | N                | N              | N          | N               | N        | N | N | N        | N | N |
| PROWL                             | O              | 1                  | N          | N             | <b>G</b>              | P        | F                | P         | P          | F            | P              | P              | <b>E</b>  | <b>E</b>      | <b>E</b>      | <b>E</b>       | <b>E</b>     | <b>E</b>   | <b>E</b> | <b>G</b>         | N                | N              | N          | N               | N        | N | N | N        | N | N |
| <b>Delayed Preemergence</b>       |                |                    |            |               |                       |          |                  |           |            |              |                |                |           |               |               |                |              |            |          |                  |                  |                |            |                 |          |   |   |          |   |   |
| LOROX/LINEX <sup>b</sup>          | C              | 1                  | P          | P             | <b>G</b>              | F        | <b>E</b>         | <b>G</b>  | <b>G</b>   | F            | <b>G</b>       | F              | F         | F             | F             | F              | F            | P          | N        | N                | N                | N              | N          | N               | N        | N | N | N        | N | N |
| SENCOR                            | C              | 2                  | <b>G</b>   | F             | <b>E</b>              | N        | <b>E</b>         | <b>E</b>  | <b>E</b>   | <b>G</b>     | <b>E</b>       | <b>G</b>       | P         | F             | <b>G</b>      | <b>G</b>       | <b>G</b>     | F          | F        | P                | N                | N              | N          | N               | N        | N | N | N        | N | N |
| MATRIX <sup>cd</sup>              | B              | 1                  | <b>G</b>   | F             | F                     | P        | <b>E</b>         | F         | F          | F            | <b>E</b>       | F              | <b>G</b>  | F             | <b>G</b>      | <b>G</b>       | <b>G</b>     | F          | F        | -                | N                | N              | P          | P               | P        | N | N | P        | P | P |
| MATRIX + SENCOR <sup>cd</sup>     | B/C            | 2                  | <b>G</b>   | F             | <b>E</b>              | P        | <b>E</b>         | <b>E</b>  | <b>E</b>   | <b>G</b>     | <b>E</b>       | <b>G</b>       | <b>G</b>  | F             | <b>G</b>      | <b>G</b>       | <b>G</b>     | F          | F        | -                | N                | N              | P          | P               | P        | N | N | P        | P | P |
| <b>Postemergence</b>              |                |                    |            |               |                       |          |                  |           |            |              |                |                |           |               |               |                |              |            |          |                  |                  |                |            |                 |          |   |   |          |   |   |
| SENCOR                            | C              | 2                  | <b>G</b>   | F             | <b>E</b>              | N        | <b>G</b>         | <b>E</b>  | <b>E</b>   | <b>G</b>     | <b>E</b>       | F              | P         | P             | F             | F              | F            | F          | F        | P                | N                | N              | N          | N               | N        | N | N | N        | N | N |
| MATRIX <sup>cd</sup>              | B              | 1                  | <b>G</b>   | P             | F                     | F        | <b>E</b>         | F         | F          | F            | <b>E</b>       | <b>G</b>       | <b>G</b>  | <b>G</b>      | <b>G</b>      | <b>G</b>       | <b>G</b>     | <b>G</b>   | P        | N                | N                | F              | <b>G</b>   | F               | N        | N | F | <b>G</b> | F |   |
| MATRIX + SENCOR <sup>cd</sup>     | B/C            | 2                  | <b>G</b>   | F             | <b>E</b>              | F        | <b>E</b>         | <b>E</b>  | <b>E</b>   | <b>G</b>     | <b>E</b>       | <b>G</b>       | <b>G</b>  | <b>G</b>      | <b>G</b>      | <b>G</b>       | <b>G</b>     | <b>G</b>   | P        | N                | N                | F              | F          | F               | N        | N | F | F        | F |   |
| POAST                             | A              | 1                  | N          | N             | N                     | N        | N                | N         | N          | N            | N              | N              | <b>E</b>  | <b>G</b>      | <b>E</b>      | <b>E</b>       | <b>E</b>     | <b>E</b>   | <b>E</b> | <b>E</b>         | N                | N              | N          | <b>G</b>        | N        | N | N | <b>G</b> | N |   |
| SELECT/ARROW/SELECT MAX           | A              | 1                  | N          | N             | N                     | N        | N                | N         | N          | N            | N              | N              | <b>E</b>  | <b>G</b>      | <b>E</b>      | <b>E</b>       | <b>E</b>     | <b>E</b>   | <b>E</b> | <b>E</b>         | N                | N              | N          | <b>G</b>        | N        | N | N | <b>G</b> | N |   |

Herbicide Site of Action: A = ACCase inhibitor; B = ALS inhibitor; C = Photosynthesis inhibitor; O = Other.  
P = Poor; F = Fair; **G** = Good; **E** = Excellent; N = None

Crop Tolerance: 1 = Minimal risk of crop injury; 2 = Crop injury can occur under certain conditions (soil applied — cold, wet; foliar applied — hot, humid); 3 = Severe crop injury can occur. Follow precautions under Remarks and Limitations and on the label; 4 = Risk of severe crop injury is high. Recommended only in rescue situations.

\* The above ratings are a relative comparison of herbicide effectiveness. Weather conditions greatly influence the herbicide's effectiveness, and weed control may be better under favorable conditions or poorer under unfavorable conditions.

- <sup>a</sup> Outlook provides good control of hairy nightshade.
- <sup>b</sup> Lorox/Linex provides good control of emerged wild buckwheat.
- <sup>c</sup> Will suppress triazine-resistant lambsquarters.
- <sup>d</sup> Hairy nightshade is more susceptible to Matrix applications than eastern black nightshade.