Relative Effectiveness of Herbicides Available for Use in Pepper in New York for 2015

<table>
<thead>
<tr>
<th>Herbicide Trade Name</th>
<th>Common Name</th>
<th>Timing $^1$</th>
<th>MOA $^2$</th>
<th>Broadleaf Annuals $^2$</th>
<th>Annual Grasses</th>
<th>Perennials</th>
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<td></td>
<td></td>
<td>common lambsquarter</td>
<td>common purslane</td>
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<td>common ragweed</td>
<td>pigweed</td>
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<td>smart weed</td>
<td>galinsoga</td>
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<td>mustard</td>
<td>nightshade</td>
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<td>velvetleaf</td>
<td>barnyardgrass</td>
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<td>crabgrass</td>
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<td>foxtail sp.</td>
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<td>quackgrass</td>
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<td>yellow nutsedge</td>
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**Preemergence Surface-applied**

- Command 3ME: clomazone (PreE) 13
- *Dual Magnum: metolachlor (PreT; PostT) 15
- Prefar: bensulide (PPI; PreE) 8
- Prowl H2O: pendimethalin (PreT; PostT) 3
- Sandea: halosulfuron (PreE) 2

**Preplant-incorporated**

- Devrinol: napropamide (PPI) 15
- Prefar: bensulide (PPI; PreE) 8
- Treflan: trifluralin (PPI) 3

**Postemergence activity**

- Aim: carfentrazone (PostE) 14
- *Gramoxone: paraquat (PreE; PostE) 22
- Poast: sethoxydim (PreE; PostE) 1
- Reflex $^3$: fomesafen (PreT) 14
- Roundup WM: glyphosate (PostE) 9
- Sandea: halosulfuron (PostE) 2
- *Select Max: clethodim (PreE; PostE) 1

Effectiveness may vary with method of application, rate, use of adjuvant, size of weed, and soil and climate factors. See 2015 Cornell Commercial Vegetable Production Guidelines for more details. Always read and follow label directions.

$^1$ Timing: PPI = pre-plant incorporated; PreE = pre-emergent; PreT = pre-transplant; PostT = post-transplant; PostE = post-emergence.

$^2$ MOA = Mechanism of Action number as a guide for resistance management.

$^3$ Special Local Needs Registration (SLN), requires indemnification and SLN label in possession.

* Restricted-use pesticide.

† Not for use in Nassau/Suffolk Counties.
 Major Weeds in New York: Ragweed, lambsquarters, redroot pigweed, galinsoga, nightshade species, yellow nutsedge, annual and perennial grasses, mustards, and others are a problem throughout the growing season.

Weed Issues: Reduced yields from weed competition, weeds growing up through planting holes of plastic mulch can be a particular problem.

Timing of Control: Pre-plant, pre-emergence, and post-emergence.

Yield Losses: Losses can run as high as 75% in untreated fields. Typical losses are 1-5%.

Regional Differences: Weed spectra can vary regionally.

Cultural Control Practices: Planting on plastic-mulched beds can aid in weed control. Many growers use hand-weeding to clean up weed escapes. Some cultivation is practiced between the beds, but aggressive cultivation can pull up the edges of the plastic mulch.


Post-Harvest Control Practices: Application of herbicides and/or cultivation after harvest can be useful in controlling perennial weeds.

Other Issues: Read herbicide labels for rotational restrictions, transplant usage and possible crop injury when residuals are left on plastic mulch that could washing down into transplant holes or contact crop.


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