

## Insecticide Treatment Options for Armyworm in Field Corn

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See <https://www.greenbook.net> or other resources for additional registrations.

\*Consult product label for specific information and restrictions.

### IRAC Mode of Action Classification:

- Group 1 = Acetylcholine esterase inhibitors; 1A = Carbamates, 1B = Organophosphates
- Group 3 = Sodium channel modulators
- Group 5 = Nicotinic acetylcholine receptor agonists (allosteric), Spinosyns
- Group 11 = Microbial disruptors of insect midgut membranes (includes transgenic crops expressing *Bacillus*); 11A = *B. t.* subsp. *kurstaki*
- Group 18 = Ecdysone receptor agonists, Diacylhydrazines
- Group 28 = Ryanodine receptor modulators, Diamides

**R**= Restricted-Use Product

| Mode Of Action | Product Name | Common Name | Rate (Formulation/Acre)  | Restrictions/Comments  |
|----------------|--------------|-------------|--|--|
| 3 <b>R</b>     | Ambush 2EC   | permethrin  | At Planting:<br>0.5 fl oz/1000 row ft<br><br>Pre-Emergence,<br>and Post-Emergence:<br>6.4-12.8 fl oz                                       | Apply in an in-furrow, band, or t-band at planting in a minimum of a 4-inch band. PHI 30 days for grain or fodder (stover). Forage may be harvested on the day of application.   |
| 3 <b>R</b>     | Arctic 3.2EC | permethrin  | At Planting:<br>0.3 fl oz/1000 row ft<br><br>Pre-Plant Incorporated or<br>Pre-Emergence:<br>0.3-0.6 fl oz/1000 row ft<br>or 4-6 fl oz/acre | Planting time: apply as an in-furrow, band or t-band treatment using a minimum 4 inch band.<br>Pre-Plant Incorporated and Pre-Emergence: apply in time period from 5 days prior to planting up to emergence of the crop. PHI 30 days for harvest of grain or fodder (stover). Forage may be harvested on the day of application. |

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|         |  |  | Post Emergence:<br>4-6 fl oz/acre  |  |
| 3 R     | Asana XL   | esfenvalerate                              | 5.8-9.6 fl oz  | PHI 21 days.   |
| 3 R     | Baythroid XL   | cyfluthrin                                 | 1.6-2.8 fl oz  | PHI 21 days for grain or fodder and 0 days for green forage. Recommended for use against 1st and 2nd instar larvae.  |
| 28      | Belt SC  | flubendiamide                              | 2-3 fl oz  | PHI 1 day for green forage and silage and 28 days for grain or stover.   |
| 3, 28 R | Besiege  | lambda-cyhalothrin,<br>chlorantraniliprole | 6-10 fl oz   | PHI 21 days. Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment. Use higher listed rates within the listed rate range for large larvae.          |
| 11A     | Biobit, Deliver,<br>Dipel, Lepinox,<br>XenTari, etc.                                     | <i>Bacillus thuringiensis</i>              | See Product Label  | PHI 30 days.   |
| 3R      | Brigade 2EC,<br>Fanfare 2EC,<br>Bifenture EC,<br>Discipline 2EC,<br>Sniper,<br>Tundra EC | bifenthrin                                 | At Planting:<br>0.15-0.30 fl oz/1000 row ft<br><br>Pre-Plant Incorporated:<br>3-4 fl oz/acre<br><br>Pre-Emergence:<br>2.56 fl oz/acre<br><br>Post Emergence:<br>2.1-6.4 fl oz/acre | PHI 30 days. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. Do not apply to soil where there is greater than 30% cover of crop residue remaining. |
| 3 R     | Capture 3RIVE 3D   | bifenthrin                                 | At Planting:<br>4-16 fl oz/acre  | Liquid insecticide for use in a 3RIVE 3D system only.  |
| 3 R     | Capture LFR  | bifenthrin                                 | At Planting:<br>0.20-0.39 fl oz/1000 row ft<br><br>Pre-Plant Incorporated:<br>4.0-5.3 fl oz/acre<br><br>Pre Emergence:<br>3.4 fl oz/acre   | Capture LFR insecticide is for mixing directly with liquid fertilizer to control soil insect pests. Do not apply to soil where there is greater than 30% cover of crop residue remaining.            |

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| 1B, 3 R | Cobalt          | chlorpyrifos and gamma cyhalothrin                     | PrePlant,<br>At-Plant,<br>or Pre-Emergence:<br>13-38 fl oz<br><br>Post-Emergence:<br>13-26 fl oz                              | PHI 21 days for grain, ears, forage or fodder.  |
| 1B, 3 R | Cobalt Advanced | chlorpyrifos and gamma cyhalothrin                     | PrePlant,<br>At-Plant,<br>or Pre-Emergence:<br>11-38 fl oz<br><br>Post-Emergence:<br>11-26 fl oz                              | PHI 21 days for grain, ears, forage or fodder.  |
| 28      | Coragen         | chlorantraniliprole                                    | 3.5-7.5 fl oz   | PHI 14 days.  |
| 3 R     | Declare         | gamma-cyhalothrin                                      | 1.02-1.54 fl oz   | PHI 21 days for grain, silage and fodder.   |
| 3 R     | Delta Gold      | deltamethrin   | 1.5-1.9 fl oz   | PHI 21 days for grain or fodder. PHI 12 days for cutting or grazing for forage.   |
| 11A     | Dipel ES        | <i>Bacillus thuringiensis kurstaki</i> strain ABTS-351 | 2.0-4.0 pts   | Treat when plants first exhibit feeding signs in the whorl of leaves.   |
| 3 R     | Ethos 3D        | bifenthrin   | At Planting:<br>0.21-1.05 fl oz/1000 row ft   | Liquid insecticide/fungicide for use in a 3RIVE 3D system only.   |
| 3 R     | Ethos XB        | bifenthrin   | At Planting:<br>3.4-17.0 fl oz/acre<br><br>PPI: 4-5.3 fl oz/acre<br><br>PRE: 3.4 fl oz/acre<br><br>Foliar: 2.8-8.5 fl oz/acre | For mixing directly with liquid fertilizer to control listed soil pests. Contains a fungicide, <i>Bacillus amyloliquifaciens</i> strain D747 for suppression of seedling diseases. PHI 30 days for grain, silage and grazing. |
| 3 R     | Fastac EC       | alpha-cypermethrin                                     | 3.2-3.8 fl oz   | PHI 30 days for grain and stover. PHI 60 days for forage.   |
| 3 R     | Hero            | zeta-cypermethrin and bifenthrin                       | 4.0-10.3 fl oz  | Labelled for at planting-time and foliar applications. For armyworm spp. at planting, apply on the soil surface in a 5-7 inch band in a minimum of 3-7 gallons per acre. PHI  |

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|                            |  |                                       |  | 30 days for grain and stover and 60 days for forage.  |
| 18                         | Intrepid 2F  | methoxyfenozide                       | 4-16 fl oz                                       | PHI 21 days.  |
| 1A R                       | Lannate LV   | methomyl                              | 0.75-1.50 pts                                    | PHI 21 days for ears and stover, and 3 days for forage.   |
| 1A R                       | Lannate SP   | methomyl                              | 0.25-0.50 lb                                     | PHI 21 days for ears and stover, and 3 days for forage.   |
| 1B R                       | Lorsban Advanced,<br>Lorsban 4E,<br>Govern 4E,<br>Hatchet,<br>Warhawk,<br>Yuma 4E              | chlorpyrifos                          | 1-2 pts  | PHI 21 days before harvest of grain, ears, forage or fodder.  |
| 3 R, and<br>11 (fungicide) | Manticor LFR   | bifenthrin and<br>pyraclostrobin      | At Planting:<br>0.49-1.09 fl oz/1000 row ft      | For soil insect pests and soilborne/seedling disease control and plant health in corn by mixing directly with liquid fertilizer using at-plant (t-band or in-furrow) applications.  |
| 1B R                       | Methyl 4EC   | methyl parathion                      | 0.5 pt   | PHI 12 days. Do not apply during the pollen shed period.  |
| 3 R                        | Mustang Maxx,<br>Respect   | zeta-cypermethrin                     | 3.2-4.0 fl oz                                    | PHI 30 days for grain and stover. PHI 60 days for forage.   |
| 1B R                       | Lorsban Advanced,<br>Lorsban 4E,<br>Govern 4E,<br>Hatchet,<br>Nufos 4E,<br>Warhawk,<br>Yuma 4E | chlorpyrifos                          | 1-2 pts  | For aerial applications use 2 - 5 gal of spray per acre. Do not apply within 35 days of harvest of grain.   |
| 1B R                       | PennCap-M  | microencapsulated<br>methyl parathion | 2-3 pts  | PHI 12 days for harvest, forage and grazing.  |
| 3 R                        | Pounce 1.5G  | permethrin                            | 6.7-10.0 lbs<br>broadcasted,<br>8 oz/1000 row ft | May be applied as a pre-plant incorporated, pre-emergence, planting time or foliage use application. Do not make treatments less than 7 days apart. PHI 30 days for grain and fodder (stover). Forage may be harvested on the day of application. |
| 3 R                        | Pounce 25WP  | permethrin                            | 6.4-9.6 oz                                       | Up to 0.6 lb ai per acre may be used per season.  |
| 3 R                        | Proaxis  | gamma-<br>cyhalothrin                 | 2.56-3.84 fl oz                                  | For control of 1st and 2nd instars only. PHI 21 days.   |
| 5                          | Radiant SC   | spinetoram                            | 3-6 fl oz  | *Not labelled for control of yellowstriped armyworm or western yellowstriped armyworm.  |

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|         |  |                                  |   | PHI 28 days for grain and 3 days for fodder or forage.   |
| 1A      | Sevin XLR Plus                                 | carbaryl                         | 1-2 qts   | PHI 48 days for grain and fodder or 14 days for grazing and silage.  |
| 1B, 3 R | Stallion                                       | chlorpyrifos + zeta-cypermethrin | 9.25-11.75 fl oz  | PHI 30 days for grain or stover and 60 days for forage.  |
| 3 R     | Steed  | zeta-cypermethrin and bifenthrin | 3.5-4.7 fl oz   | PHI 30 days for grain or stover and 60 days for forage. Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.  |
| 3 R     | Temitry LFR                                    | bifenthrin                       | At Planting:<br>8.5-19 fl oz/acre   | For soil insect pests and soilborne/seedling disease control and plant health in corn by mixing with liquid fertilizer using at-plant (t-band or in-furrow) applications.  |
| 5       | Tracer   | spinosad                         | 1-3 fl oz   | PHI 28 days for grain and 3 days for fodder or forage harvest.   |
| 3 R     | Tombstone                                      | cyfluthrin                       | 1.6-2.8 fl oz   | PHI 21 days for grain or fodder and 0 days for green forage. Recommended for use against 1st and 2nd instar larvae.  |
| 1B, 3 R | Tundra Supreme                                 | chlorpyrifos and bifenthrin      | At Planting:<br>0.4-0.8 fl oz<br><br>Post-Emergence:<br>5.6-16.8 fl oz  | PHI 30 days for grain and silage. Shallow incorporation using a rotary hoe or other equipment may improve control.   |
| 3 R     | Warrior w/<br>Zeon Technology,<br>Silencer     | lambda-cyhalothrin               | 2.56-3.84 fl oz   | Recommended for control of 1st and 2nd instars only. PHI 21 days for harvest, grazing or cutting treated crops for feed.   |
| 3 R     | Warrior II w/<br>Zeon Technology,<br>Lamcap II | lambda-cyhalothrin               | 1.28-1.92 fl oz   | Recommended for control of 1st and 2nd instars only. PHI 21 days for harvest, grazing or cutting treated crops for feed.   |
| 3 R     | Xpedient Plus V                                | bifenthrin                       | At Planting:<br>2.56-10.24 fl oz/acre OR<br>0.15-0.60 fl oz/1000 row ft<br><br>Pre-Plant Incorporated:<br>3-4 fl oz<br><br>Pre-emergence:<br>2.56 fl oz | Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch t-band over the open furrow, in-furrow or broadcast to the soil surface.<br><br>Incorporation of this product should be close to the intended seed planting depth, and no deeper than 3 inches.<br><br>May be applied and can be tank mixed with pre-emergence herbicides. |

