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Postemergence and Harvest Aid Herbicides for Soybeans

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Weed Science


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Weeds limit soybean yields probably more than any other single factor. A combination of cultural practices and the use of herbicides is needed to reduce weed infestation. Many farmers depend too much upon herbicides alone to control weeds and do not effectively use the combination approach. The cleanest soybean fields are generally those that are in a rotation system. If your soil permits rotating your crop, this should be a primary consideration. Plant your crop when you can expect fast germination and growth. Shade is a good weed control measure. In extremely weedy fields, cultivate close with rotary shields. Where weeds such as johnsongrass and cocklebur are a problem use competitive varieties.

Effective chemical control is largely dependent upon the weed populations of each field, the capabilities of the available herbicides to control these weeds, and the timing of applications. Instances exist each year where the stage of growth of the weeds and soybeans is such that effective use of postemergence herbicides is no longer effective. If this is the case, save your money and hope for another chance at a later stage of growth or resort to cultural practices to control these weeds.

**POSTEMERGENCE HERBICIDES**

Postemergence applications of herbicides are usually necessary to obtain maximum weed control in soybean fields. Timely application of postemergence herbicides is essential. Most early postemergence treatments work best when weeds and grasses are less than 2 inches tall and will usually do a better job when the weather is warm.

For severe infestation of difficult-to-control broadleaf weeds such as jimsonweed, cockle-
bur, giant ragweed, and ivy leaf morningglory which are not adequately controlled by preplant and preemergence treatments, use the following control program:

**Step 1 --** Apply preplant or preemergence herbicides to control annual grasses.

**Step 2 --** Apply either a delayed preemergence-cracking or early postemergence herbicide for the first flush or annual broadleaf weeds. The delayed preemergence-cracking treatment is preferred if conditions permit.

**Step 3 --** Apply directed postemergence herbicides for later flushes of broadleaf weeds when the soybeans are 5 to 8 inches tall and before the weeds are more than half the height of the soybeans. A preferred height for weeds is less than 2 inches. Confine spray to the lower third of the soybean plants.

Select individual herbicides for each component treatment based on the weed species present in the individual fields.

**DELAYED PREEMERGENCE AND CRACKING STAGE**

**Dyanap or Ancrack** *(Naptalam+Dinoseb) (for broadleaf weeds).* Apply 4.5 to 6 quarts of formulation per acre broadcast 3 days after planting and before first soybean leaves open. Follow label directions.

**Premerge 3** *(Dinoseb) (for broadleaf weeds).* Apply 4 to 6 quarts in 30 gallons water per acre broadcast 3 days after planting or 2 quarts per acre at emergence before first soybean leaves open. Do not use on very light sandy soils. Follow label directions.

**Lasso+Premerge 3** *(for broadleaf and grass weeds).* Apply 2 to 3 quarts of Lasso plus 2 quarts of Premerge 3 in 30 gallons water per acre broadcast 3 days after planting and before first soybean leaves open. Do not use on sand or loamy sand soils as injury may occur. Follow label directions.

**Lasso+Dyanap** *(for broadleaf and grass weeds).* Apply 2 quarts of Lasso plus 4.5 to 6 quarts Dyanap per acre broadcast 3 days after planting and before first soybean leaves open. Follow label directions.

**EARLY POSTEMERGENCE**

**Norex or Tenoran** *(for broadleaf weeds).* Apply at 2 to 3 pounds per acre plus a suitable adjuvant added at 1 pint in 25 gallons water. Use 25 to 40 gallons water per acre for ground application and a minimum of 5 gallons water with 1 pint of adjuvant for aerial application. Follow label directions. Do not graze treated fields with livestock. Do not make more than

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*Timing is critical. Too early application can result in poor weed control; too late application can result in soybean injury. DO NOT spray if soil surface is wet or if first leaves have opened or if temperatures exceed 98°F. CAUTION: formulations containing Dinoseb may be fatal to man or animals if swallowed or absorbed through the skin.*
2 applications to the same crop or field in any one year. Do not apply a single treatment within 90 days or a sequential treatment within 120 days of harvest.

**Basagran** (for broadleaf weeds). Apply 0.75 to 1 quart Basagran in 10 to 40 gallons per acre depending upon weed size and species present. Follow label directions. Apply when weeds are small and actively growing. Do not apply within 65 days of harvest. Do not feed treated forage to livestock. Unsatisfactory control may result if applied after prolonged periods of drought.

**Dyanaq** (for broadleaf weeds). Apply at 2 to 4 quarts in 10 gallons water per acre depending upon weed size and species present. Apply after the second trifoliate stage until 20 inches high. Follow label directions. CAUTION: DO NOT APPLY TO WET FOLIAGE. Use high pressure and low spray volume to minimize soybean injury. Some soybean injury often occurs, but soybeans usually recover with no adverse effects.

**DIRECTED POSTEMERGENCE**

**Premerge 3, Sinox PE, Unico Dinitro PE** **(for broadleaf weeds less than 3 inches tall).** Apply 3 to 4 quarts per acre broadcast in 30 to 50 gallons water as a directed spray when soybeans are 5 to 6 inches tall up to beginning of bloom. Follow label directions.

**Butoxone SB or Butyrac 200** **(for broadleaf weeds less than 3 inches tall).** See label for exact rates and follow label directions. Apply when soybeans are 8 to 10 inches tall to mid-bloom stage. Do not harvest within 60 days.

**DOUBLE CROP INTO SMALL GRAIN STUBBLE**

**Lorox+Paraquat** (for broadleaf and grass weeds). Apply 1 to 3 pounds Lorox plus 1.5 to 2 pints Paraquat per acre in sufficient water to insure complete wetting of vegetation. Add surfactant to enhance wetting. Follow label directions. Rates of Lorox should not exceed preemergence rate suggested for soil type encountered. Use 2 pints Paraquat when Lorox rate is less than 2 pounds per acre. A preemergence application of Lasso may be required to ensure control of annual grasses.

**Sencor+Lasso+Paraquat** *(for broadleaf and grass weeds).* Apply 0.5 to 2 pounds Sencor plus 2 to 2.5 quarts Lasso and 1 to 2 pints Paraquat per acre in 20 to 60 gallons water. Use the higher volume in fields with heavy weed infestation or large amounts of crop residue. Use an appropriate surfactant at 8 ounces per 100 gallons of spray solution. See label for specific rates and follow label directions. Use the higher rate of Paraquat for weeds 4 to 6 inches tall. This treatment will not control weeds over 6 inches tall and will not control shattercane or perennial weeds. SOYBEANS EXPOSED AT TIME OF APPLICATION WILL BE KILLED. Do not use treated foliage for feed or forage.

**Use oiling type or other precision-directed application equipment. Soybeans must be taller than weeds. Direct spray to lower one-third of soybeans. Large weeds will not be controlled effectively. Do not graze or feed treated soybeans within 3 weeks after harvest.**
HARVEST AID DESICCANT

Do not apply harvest aid chemicals too early. Soybean seed continue to increase in weight very late into the season. As long as leaves are green, there is apparently some steady increase in seed size. Too early an application of a desiccant will reduce soybean yields, seed size, oil content, and seed quality. To minimize the chances of reducing soybean yield, do not apply desiccants until at least half the soybean leaves are on the ground and the others are yellow. Also, look for the presence of some brown pods. Large succulent weeds may take two or more weeks for the stems to dry after desiccant application. With early maturing varieties, a desiccant may not be needed if the degree of weed infestation is low enough to prevent a moisture problem during harvest. Plan next year's weed control program so as to avoid the need of a desiccant next fall.

Paraquat (for broadleaf and grass weeds). Use 0.5 to 1 pint paraquat per acre broadcast. Use the higher rate for cocklebur. Add 1 pint Ortho X-77 per 100 gallons of spray solution. For aerial application use 2 to 5 gallons spray solution per acre; for ground equipment, use 20 to 40 gallons per acre. Follow label directions. Do not pasture livestock within 15 days of treatment. Remove livestock from treated fields at least 30 days before slaughter. CAUTION: Drift may injure desirable vegetation in close proximity.