

OSPREY, A NEW HERBICIDE FOR WEED CONTROL IN WHEAT

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Osprey (mesosulfuron-methyl) is a Bayer Corporation product in the *sulfonylurea* herbicide chemistry group. Osprey is currently registered on wheat in California. Osprey is a unique herbicide for use on wheat in that it controls many of the grasses such as canarygrass and wild oats as well as numerous broadleaf weeds. Osprey is an ALS inhibitor. Growers will be able to make one trip across the field instead of the usual two trips that it currently requires controlling grasses with one herbicide and broadleaves with another. *Osprey will turn the wheat yellow 4-5 days after the application and may cause stunting.* The wheat will metabolize the herbicide over a 2-3 week period and the yellowing will slowly dissipate.

In the San Joaquin Valley, UC research has shown that Osprey *will control* the following *broadleaf* weeds in wheat: wild radish, chickweed, wild mustard, pigweed, shepherds purse, and henbit. It will *suppress* the growth of the following weeds: fiddleneck, yellow starthistle, common groundsel, and malva. Osprey has *provided control* of the following *grasses*: annual bluegrass, littleseed and hooded canarygrass, annual ryegrass, wild oat and *suppression* of hairy chess, soft, ripgut and downy brome.

In the Imperial Valley and lower desert, research has shown that Osprey *will control* the following weeds: londonrocket, malva, swine cress, wild beets, red clover, goosefoot, littleseed canarygrass, and wild oats. Some of the weeds *not controlled* include silversheath knotweed, rabbitsfoot grass, Mexican sprangletop and red sprangletop. Other weeds in the tests that were suppressed were annual sowthistle, sunflower, and purple nutsedge.

Observations indicate that Osprey in combinations with some other herbicides (Buctril, 2,4-D) may reduce the degree of grass control by 5-15%. An adjuvant is necessary and recommended by the label for maximum control. A nitrogen fertilizer solution is highly recommended to assure control under adverse conditions.

Planting back with different crops may be a problem in areas with close rotations because the material has a moderate level of persistence. The label ranges from 7 days to replant wheat up to 12 months to plant corn.

Even though there is some reduction of growth early in the stages of development, various trials have indicated no significant yield reductions with the use of Osprey.