

DUPONT AFFINITY PRODUCTS TANKMIXED WITH STARANE NXT, CLEANWAVE OR FLORASULAM. MICHAEL T. EDWARDS, ERIC P. CASTNER, JAMES D. HARBOUR, C. WILLIAM KRAL, JEFF H. MEREDITH, DuPont Crop Protection, Wilmington, DE 19802

In 2007 twenty-five tests were conducted to determine the efficacy when Affinity Tankmix and Affinity BroadSpec (Thifensulfuron-methyl and Tribenuron-methyl premixes) were tankmixed with Florasulam (6 tests) or Starane NXT (10 tests - Fluroxypyr + Bromoxynil) or Cleanwave (9 tests - Fluroxypyr + Aminopyralid).

Cleanwave was tested at 7 and 14 fl oz/ac (7 fl oz = 0.074 oz ai Aminopyralid + 1.05 oz ai fluroxypyr). Control with Cleanwave alone at 7 fl oz/ac was poor on mayweed chamomile, blue mustard, flixweed, and prickly lettuce. Only lambsquarter, sunflower and wild buckwheat were controlled with 7 fl oz/ac of Cleanwave. Doubling the rate to 14 fl oz/ac improved flixweed and prickly lettuce to near control levels >80%, but control of mayweed chamomile and blue mustard remained poor. The addition of Affinity BroadSpec to the 14 fl oz/ac rate controlled mayweed chamomile. All other species were controlled with the addition of Affinity BroadSpec to the 7 fl oz/ac rate. The addition of Affinity Tankmix to the 14 fl oz/ac rate and Affinity Tankmix at 1.0 oz/ac to the 7 fl oz/ac rate controlled mayweed chamomile. All other species were controlled with the addition of Affinity Tankmix to the 7 fl oz/ac rate.

Starane NXT was tested at 3 rates (1/2 pt/ac, 3/4 pt/ac, 1 pt/ac = 1.2 oz ai fluroxypyr + 4.66 oz ai bromoxynil) and at 2 timings of application – 2” and 4” weeds. No crop response was seen with any treatment at the early application timing. Control with Starane NXT alone at 8, 12 or 16 fl oz/ac controlled redroot pigweed, lambsquarter, sunflower, wild buckwheat and cocklebur. The addition of Affinity BroadSpec to the 8 fl oz/ac rate improved control 5-8% on pigweed and sunflower. No crop response was seen with any treatment at the late application timing. Control with Starane NXT alone at 8, 12 or 16 fl oz/ac controlled sunflower, wild buckwheat and cocklebur, but was about 10% less in control of redroot pigweed and lambsquarter. The addition of Affinity BroadSpec to the 8 fl oz/ac rate improved control 5-6% on pigweed and lambsquarter.

Florasulam at 1X or 2X rates did not control lambsquarter and was marginal on prickly lettuce. Florasulam at 1X suppressed blue mustard and flixweed, and at 2X did provide control. Frontline did not control prickly lettuce, but did control flixweed, and blue mustard. Florasulam + Axial only controlled blue mustard and flixweed, and crop response increased to 6%. Frontline + Affinity BroadSpec and Florasulam + Axial + Affinity Tankmix controlled all species. Addition of 2,4-D ester to Florasulam + Affinity BroadSpec controlled all species, but did increase crop response to 13%.