

Control of Hooded Canarygrass with Puma: Matthew H. Ehlhardt, AgrEvo USA, W. Mick Canevari, University of California Cooperative Extension.

Abstract: Grassy weeds in the Northern San Joaquin and Sacramento Valley small grain growing areas include wild oat, annual ryegrass, hood canarygrass and various brome grasses. The standard postemergence herbicide program has included Hoelon and Avenge since the early 1980's. Presently there are limited tools for brome grass. Avenge is registered for controlling wild oats. Hoelon controls all four species but does not have any brome grasses on the California section of its label and has growth restrictions for applying to hood canarygrass and wild oats. Recent surveys conducted by the University of California Cooperative Extension has indicated that canarygrass (hood and little seed) is becoming the primary grassy weed in California wheat and a problem in barley. The window for applying Hoelon to control hood canarygrass is limited to the 1-3 leaf stage of growth of the weed with only one application allowed per growing season. Multiple germinations or missing the appropriate application timing may result in a yield reducing hood canarygrass infestation.

Puma (fenoxaprop-p-ethyl and menfepyr-diethyl) is a new annual grassy weed herbicide manufactured by AgrEvo USA. Research was conducted during 1996 and 1997 to evaluate the efficacy of Puma on different growth stages of hooded canarygrass. Rates of 0.067, 0.089 and 0.112 lbs.a.i./A were applied to the 1-4 and 6-7 leaf stage of weed development. All treatments were applied using a CO₂ backpack sprayer and replicated three times. Percent visual weed control and crop phytotoxicity ratings were recorded at 14 and 28 DAT and prior to harvest. Results from the preharvest assessment, averaged across three locations, had control ratings of 95.9, 98.5 and 100% for the three rates at the early timing and 84.4, 85, and 100% at the latter timing. At 14 DAT crop phytotoxicity ratings had early damaged expressed as chlorosis ranging from 6.7 - 8.3% with the early timing and 10.1 - 11.8 % with the late timing. No crop symptoms were evident by the preharvest evaluation. Yield data did show an increase response in removing the species early with yield increases ranging from 4.6 - 23.7% with the early applications when compared to the same rates applied at the latter timing.