

The response of weeds and cut stems of *Sporobolus virginicus* (L.) Kunth (a native Hawaiian ground cover) to two forms of oxadiazon applied as a component of a hydromulch cap. Scott Lukas*, Joseph DeFrank, Orville C. Baldos, University of Hawaii at Manoa, Honolulu; and Glenn Sakamoto, USDA-NRCS, Hoolehua, HI.

United States Department of Transportation initiatives are calling for increased use of native plants for highway rights-of-way re-vegetation. *Sporobolus virginicus*, a native coastal grass in Hawaii, has been planted on the Mokulele highway on Maui with no contractor specified protocols for weed control during establishment. While roadside plantings of *S. virginicus* can be successfully accomplished by hydromulch capping of cut stems, weed management is pivotal for successful establishment. In this study, the efficacy and safety of pre-emergence herbicides applied with the hydromulch cap over cut stems was evaluated. Oxadiazon in two forms, granule and suspension concentrate, was applied at 0.91 and 1.36 kg ai/ha. *S. virginicus* response was recorded as counts of new green shoots 48 days after planting (DAP), aboveground biomass at 110 DAP, percent visual coverage at 110 DAP and weed suppression data was recorded at 48 DAP. Data indicated that number of new green shoots was not significantly affected by the hydromulch cap treatments and that the highest level of *S. virginicus* biomass and visual coverage occurred with the G form of oxadiazon at 0.91 kg ai/ha, all other herbicide treatments were not significantly different than the control. Weed control was excellent (80-100%) for all herbicide treatments. The G-form of oxadiazon, in the hydromulch cap, can provide commercially acceptable weed control and improve establishment of cut stems of *S. virginicus* in roadside plantings.