Efficacy of sea water in combination with trifloxysulfuron and quinclorac to control weeds in salt tolerant tropical turfgrass.

Abstract

Research was designed to reduce herbicide use by replacing post emergence herbicides with readily available sea water to control weeds in salt tolerant tropical turfgrass. Different concentration of sea water in combination with trifloxysulfuron-sodium and quinclorac were used in this study. Maximum injury of 70-100% occurred at 21 DAT in Sporobolus diander, Cyperus aromaticus, Cyperus rotundus, and Emilia sonchifolia, except E. atrovirens, when treated with trifloxysulfuron-sodium {N-(4-6-Dimethoxy2-pyrimidiny1)-3-(2,2,2-rifluoroethoxy)-pyridine-2-sulfonamide sodium salt} with sea water, trifloxysulfuron-sodium with sea water, trifloxysulfuron-sodium and quinclorac (3,7-dichloro-8-quinoline carboxylic acid) with sea water and quinclorac with sea water. The trifloxysulfuron-sodium and quinclorac herbicide can be effectively used for weed control in C. dactylon 'satiri' and P. vaginatum respectively; and both the herbicides can be used for effective weed control in Z. japonica.

Keyword: Sea water; Weed; Turfgrass; Trifloxysulfuron-sodium; Quinclorac.