

NEW HERBICIDE POSSIBILITIES FOR WEED CONTROL IN STRAWBERRY. Michael G. Particka and Bernard H. Zandstra, Research Assistant and Professor, Department of Horticulture, Michigan State University, East Lansing, MI 48824.

Strawberry growers have only six or seven herbicides available for weed management. With the anticipated loss of methyl bromide more herbicides are needed to provide weed control options for producers. Experiments were conducted in 2002 – 2005 to identify safe and effective herbicides for strawberry. Sulfentrazone 0.5 lb ai/a applied in the fall to dormant strawberry did not injure strawberry in the spring and resulted in good yields. Fall applied flumioxazin at rates greater than 0.25 lb ai/a injured strawberry and reduced yield up to 80% when applied in the year of planting. Oxyfluorfen applied at 0.5 lb ai/a did not cause visible injury strawberry when applied in the fall, but yield was reduced slightly. There was no strawberry injury or yield reduction when pendimethalin or dimethenamid-P were applied in the fall. Pronamide injured strawberry severely and reduced yield 80%.

Flumioxazin applied in the spring at 0.38 lb ai/a and 0.512 lb ai/a reduced yield more than 50%. dimethenamid-P applied in the spring did not injure strawberry or reduce yield. Oxyfluorfen at 0.5 lb ai/a injured strawberry slightly but yield was not reduced. Spring applications, to strawberry that were established less than 1 year earlier, of sulfentrazone at 0.5 lb did injure strawberry in May but plants recovered by June. Applications of sulfentrazone to well established strawberry did not cause crop injury. Quizalofop and clethodim do not injure strawberry and provide good control of quackgrass and annual grasses.