

**INTERACTIONS WITH STAPLE AND  
POSTEMERGENCE GRASS HERBICIDES**

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Select with Staple all showed excellent broadleaf  
signalgrass control regardless of application sequence.

**Abstract**

Field studies were conducted during 1994, 1995 and 1996 in central Texas to evaluate the effects of tank mixing Staple with the graminicides Fusilade DX (fluazifop), Assure II (quizalofop), Select (clethodim), Poast Plus (sethoxydim) and Fusion (fluazifop + fenoxypop). Different postemergence grass herbicides were included in each study. Johnsongrass (*Sorghum halepense*) tests were conducted all three years, while studies on fall panicum (*Panicum dichotomiflorum*), browntop panicum (*Panicum fasciculatum*) and broadleaf signalgrass (*Brachiaria platyphylla*) were conducted in 1994, 1995 and 1996, respectively. One johnsongrass study in 1994 evaluated effects of tank mixes and sequential applications of Select and Staple and the broadleaf signalgrass study in 1996 evaluated tank mix and sequential applications of Fusion, Fusilade DX, Select and Staple. Staple was applied 24 hours prior to, or 24 hours after the graminicide treatment in the sequential studies. Staple was applied at 1.0 oz ai/A in all studies and postemergence grass herbicides were used at labeled rates. All treatments contained crop oil concentrate at 1% v/v and were applied with a CO<sub>2</sub> backpack sprayer delivering 15 to 20 gallons/A. Studies were arranged in a randomized complete block design with 3 to 4 replications. Plots were 2 to 4 rows wide and 25 ft. long. Johnsongrass control with Fusion, Assure II, Select, Poast Plus and Fusilade DX was excellent in all tests. When tank mixed with Staple, the effectiveness of Fusilade DX, Fusion, Poast Plus and Select was significantly reduced. In the sequential study, Select followed by Staple 24 hours later did not differ from the Select alone treatment. However, when Select followed Staple, reduced control was observed. In the fall panicum study, Poast Plus and Assure II were severely antagonized by Staple tank mixes, while Select and Fusilade were unaffected. Staple tank mixes of Poast Plus and Select showed reduced control of browntop panicum; tank mixes with Fusilade DX and Assure II demonstrated excellent control. In a broadleaf signalgrass study, Fusion showed significant antagonism; however, Fusilade and Select tank mixes did not show reduced grass control. Sequential treatments of Fusion, Fusilade and