

Peanut Response to Pyroxasulfone

W. J. GRICHAR*, Texas A&M AgriLife Research, Corpus Christi, TX 78406; P. A. DOTRAY, Texas A&M AgriLife Research, Lubbock, TX 79403.

Peanut tolerance studies with pyroxasulfone (Zidua) were conducted in the High Plains of Texas near Seminole and in south Texas near Yoakum under weed-free conditions in 2019.

Pyroxasulfone at 0.09 and 0.13 kg ha⁻¹ was applied at three different peanut growth stages: 1) at ground crack (CRACK), 2) early postemergence (EPOST), and 3) mid-postemergence (MPOST). The CRACK treatments were applied 7 to 14 days after planting (DAP), EPOST treatments applied 22 to 30 DAP, and MPOST treatments applied 35 to 41 DAP depending on location. Georgia 09B was planted at both locations.

No peanut injury of any kind was noted at either location during the growing season. No yield differences were noted with the two pyroxasulfone rates at either location; however, at both locations, peanut yields were greatest following the pyroxasulfone CRACK application and trends of reduced yields following the EPOST and MPOST applications were noted. No differences in grade were observed with any pyroxasulfone rate or application timing.

In summary, pyroxasulfone caused no type of injury during the growing season with either rate or application timing. However, trends toward reduced yield with EPOST and MPOST pyroxasulfone applications need to be further investigated to determine the possible causes for these reductions in yield and determine if other cultivars may be affected.