

GEOGRAPHY MANAGEMENT – A SUCCESS STORY

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Abstract

Glyphosate resistant Palmer amaranth has become the most troublesome pest in cotton production in Clay County Arkansas. The highly prolific and rapid growth characteristics of Palmer amaranth require near 100% control to avoid excess buildup of soil seedbank and prevent loss of crop acres. Previous research has shown Palmer seed are not long lived in the soil profile with greater than 99% being lost in four years. Zero tolerance programs on individual fields where no Palmer plants are allowed to produce seed have demonstrated that weed control costs can be reduced significantly in as little as two years. Reinfestation of individual fields can easily occur from adjacent fields, turnrows, and ditchbanks.

A group of farmers in Clay County Arkansas have banded together to implement zero tolerance on over 20,000 acres of cropland in effort to reduce chances of reinfestation and lower control cost in subsequent years. The success of this unique and holistic approach has been recognized by other educators and farmers and will be expanded in other geographic areas of the state.