

**RELEASE OF DES 607 AND LICENSING
OF H10-35-05
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Abstract

'DES 607' cotton (*Gossypium hirsutum* L.) was developed at the Delta Research and Extension Center, Mississippi Agricultural and Forestry Experiment Station (MAFES), Stoneville, MS. In 1998, marketing rights to DES 607 were licensed exclusively, through a competitive bid process, to Deltapine Seed of Scott, MS.

DES 607 was developed from the progeny of a cross made in 1986 between 'DES 920' and 'Deltapine 20.' DES 920 originated from a 1977 cross between 'ST 870IN' (nectariless line) and 'DES S11-9'. DES S11-9 was the bulk population from which 'DES 119' was selected. DES 920 was later released as a germplasm line in 1990. Deltapine 20 is a commercial cultivar widely grown throughout the Mid-South. Progeny of this cross were selected individually in the F₂ generation. Progeny of the F₂ selection, 'F07-30', which gave rise to the current strain, were yield tested in the F₄ generation and re-selected in the F₅ generation. An F₆ progeny row of the selection, 'F07-30-17', was harvested as a bulk and seed has been increased since that time without further selection except to remove any off-type plants resulting from mechanical mixing.

'H10-35-05', an experimental line of cotton (*Gossypium hirsutum* L.) was developed at the Delta Research and Extension Center, MAFES, Stoneville, MS. In 1998, marketing rights to H10-35-05 were licensed exclusively to Mycogen Corporation of San Diego, CA.

In brief, H10-35-05 was developed from the progeny of a cross that was made in 1988 between 'DES 949' and 'Acala 1517-88'. DES949 is a selection out of DES 119. Acala 1517-88 is a commercial cultivar developed by New Mexico Agricultural Experiment Station and released in 1987. The F₁ of 'H-10' was grown in Mexico in 1988-1989 and the F₂ was grown at Stoneville, MS in 1989. Progeny of this cross were selected individually (37 plants selected) in the F₂ generation and one plant became 'H10-35'. The F₃ was grown in progeny rows at Stoneville, MS in 1990. H10-35 was yield tested in the F₄ generation and re-selected in the

F₅ generation. An F₆ progeny row of the selection, H10-35-05, was harvested as a bulk and seed has been increased since that time without further selection except to remove off-type plants. In 1998, H10-35-05 was tested at multiple locations by Phytogen Seed Company under the variety name 'PSC 355'. Phytogen Seed Company, LLC. is a joint venture between Mycogen Corporation and J. G. Boswell Company.