

**DP 6211 ACALA, DP HTO PIMA
AND DP WHITEPIMA -NEW VARIETIES
FOR THE SAN JOAQUIN VALLEY
AND THE PIMA BELT**

**Deborah J. Selfridge, James M. Olvey, Dora Bustos,
Stella Ortiz, Frank H. Olvey and Kerry T. Webster
O & A, Inc.
Maricopa, AZ**

Abstract

DP 6211 ACALA (OA-211), a new Acala variety for the San Joaquin Valley (SJV) in California, was developed by O & A, Inc. and approved for release by the SJV Cotton Board for the 1998 season. Two new Pima varieties, DP HTO Pima (OA-333) and DP WhitePima (OA-337) were released for the 1997 season in Arizona, New Mexico and Texas. DP HTO Pima was approved for release in the SJV in California for the 1998 season. DP WhitePima will be submitted for approval by the SJV Cotton Board for the 1999 season.

DP 6211 ACALA demonstrated higher yields than the standard, Maxxa, in all three years of testing by the San Joaquin Valley Cotton Board (SJVCB) in both wilt and non wilt soils. In the 1996 SJV trials, DP 6211 ACALA demonstrated higher yields than GTO Maxxa with 35% less seed coat fragments. In 1996, DP 6211 ACALA demonstrated significantly better heat tolerance than either GTO Maxxa or Maxxa during a high temperature season. Seedling vigor (measured as emergence) was significantly better than Maxxa (6%). DP 6211 ACALA had lower neps on both carded and combed 50's yarn as well as 36 count rotor and ring. Significantly higher (7-14%) yarn appearance was demonstrated by DP 6211 ACALA than Maxxa. DP 6211 ACALA was significantly finer than Maxxa on the Shirley FMT III and although it demonstrated similar maturity to Maxxa, DP 6211 ACALA had lower micronaire. DP 6211 ACALA is similar to Maxxa in plant size, growth and fruiting characteristics, boll size and gin turnout (Bassett, 1997).

DP HTO Pima (High TurnOut) differs from the standard variety, S-7, in ginnability, size and color of flower, seedling vigor and seed size. DP HTO Pima is one week earlier maturing than S-7. DP HTO Pima has a compact boll that aids in storm resistance. A significantly higher lint index (gm. lint/100 seeds) of 8.0 for DP HTO Pima and 6.2 for S-7 and a looser attachment of the lint to the seed coat results in increased ginnability and higher turnout. For the past two years, a 3-5% higher turnout of DP HTO Pima over S-7 was noted at all of the commercial Pima gins. DP HTO Pima has significantly higher seedling vigor than S-7 as evidenced in both 1996 and 1997 SJVCB

trials (Bassett, 1997, 1998). DP HTO Pima (3,250 seeds/lb.) has a larger seed than S-7 (3,600 seeds/lb.). DP HTO Pima is a unique variety that provides increased turnout without sacrificing seed size and seedling vigor.

DP WhitePima differs from the standard variety, S-7, in color of lint, plant maturity and seedling vigor. DP WhitePima is white compared to the cream color of S-7 which results in better grades. Test results showed that the 50% open boll date for DP WhitePima was 5 days earlier than that of S-7. As demonstrated by plant emergence ratings, DP WhitePima had significantly greater seedling vigor than S-7. There was no significant difference in yield between DP WhitePima and S-7.