

Table 2. Lint yield and fiber quality results for the ACGA preliminary strains evaluation at Yuma, AZ, 2005.

| Strain | Lint Yield lbs/acre | Means Separation* | Percent Lint | Staple 32nds | Micronaire | Strength g/tex | Length inches | Uniformity |
|----------|------------------------|-------------------------|-----------------|-----------------|------------|-------------------|------------------|------------|
| ST5599BR | 2175.0 | a | 40.9 | 36.0 | 5.3 | 31.2 | 1.12 | 82.3 |
| DP448B | 2124.7 | a b | 39.7 | 36.7 | 5.2 | 30.6 | 1.13 | 82.6 |
| ACGA79 | 2050.2 | a b c | 41.1 | 37.0 | 5.0 | 31.1 | 1.16 | 82.8 |
| ACGA78 | 1973.0 | a b c d | 38.5 | 38.3 | 4.8 | 32.6 | 1.20 | 84.1 |
| ACGA62 | 1968.2 | a b c d | 37.5 | 37.0 | 5.4 | 32.8 | 1.15 | 82.9 |
| ACGA24 | 1962.7 | a b c d | 40.6 | 37.7 | 5.1 | 33.0 | 1.19 | 82.6 |
| ACGA65 | 1940.1 | a b c d | 36.3 | 39.3 | 5.1 | 31.8 | 1.23 | 84.5 |
| ACGA68 | 1923.7 | a b c d | 36.1 | 39.0 | 5.2 | 33.0 | 1.22 | 84.7 |
| ACGA72 | 1922.5 | a b c d | 37.0 | 37.3 | 4.9 | 32.1 | 1.17 | 83.1 |
| ACGA48 | 1911.6 | a b c d e | 37.5 | 38.0 | 5.1 | 32.5 | 1.18 | 83.8 |
| ACGA66 | 1905.6 | a b c d e f | 36.8 | 37.7 | 5.1 | 33.9 | 1.18 | 83.4 |
| ACGA47 | 1902.5 | a b c d e f | 36.8 | 39.7 | 5.4 | 34.1 | 1.24 | 84.6 |
| ACGA63 | 1878.7 | b c d e f g | 39.2 | 37.0 | 4.9 | 32.4 | 1.17 | 82.3 |
| ACGA57 | 1873.2 | b c d e f g | 36.3 | 38.7 | 5.2 | 32.5 | 1.20 | 83.6 |
| ACGA54 | 1871.0 | b c d e f g | 36.1 | 38.3 | 5.0 | 32.4 | 1.21 | 84.0 |
| ACGA20 | 1851.4 | b c d e f g h | 39.4 | 38.0 | 5.3 | 32.8 | 1.19 | 83.4 |
| ACGA82 | 1845.0 | c d e f g h i | 39.4 | 38.3 | 5.2 | 33.2 | 1.20 | 83.7 |
| ACGA59 | 1824.0 | c d e f g h i | 35.9 | 37.0 | 5.4 | 32.6 | 1.16 | 83.6 |
| DP449BR | 1821.0 | c d e f g h i j | 39.3 | 37.0 | 5.0 | 32.4 | 1.15 | 82.5 |
| ACGA74 | 1803.5 | c d e f g h i j k | 40.0 | 39.3 | 5.2 | 32.0 | 1.23 | 83.8 |
| ACGA81 | 1800.4 | c d e f g h i j k | 35.7 | 36.7 | 4.2 | 29.9 | 1.15 | 83.0 |
| ACGA75 | 1790.0 | c d e f g h i j k l | 37.7 | 37.7 | 4.8 | 32.2 | 1.17 | 83.7 |
| ACGA70 | 1784.8 | c d e f g h i j k l m | 36.6 | 38.3 | 5.1 | 31.4 | 1.19 | 83.4 |
| ACGA45 | 1761.8 | d e f g h i j k l m n | 36.3 | 38.7 | 5.2 | 33.6 | 1.21 | 84.0 |
| ACGA69 | 1747.5 | d e f g h i j k l m n | 35.5 | 38.7 | 5.3 | 31.3 | 1.22 | 84.3 |
| ACGA73 | 1741.8 | d e f g h i j k l m n | 41.3 | 37.0 | 5.0 | 32.5 | 1.16 | 83.7 |
| ACGA83 | 1722.9 | d e f g h i j k l m n | 38.5 | 38.7 | 4.6 | 34.1 | 1.21 | 83.4 |
| ACGA55 | 1717.3 | d e f g h i j k l m n | 38.7 | 37.7 | 5.2 | 33.5 | 1.18 | 83.6 |
| ACGA61 | 1708.4 | d e f g h i j k l m n o | 36.5 | 38.0 | 4.9 | 32.6 | 1.19 | 82.9 |
| ACGA60 | 1633.9 | e f g h i j k l m n o p | 35.7 | 37.7 | 5.0 | 33.2 | 1.18 | 82.6 |
| ACGA80 | 1628.1 | f g h i j k l m n o p | 36.8 | 39.3 | 4.7 | 33.2 | 1.22 | 84.7 |
| ACGA64 | 1620.3 | g h i j k l m n o p | 35.8 | 38.3 | 4.7 | 33.0 | 1.20 | 84.1 |
| ACGA49 | 1582.1 | h i j k l m n o p | 38.4 | 38.0 | 5.0 | 31.2 | 1.18 | 83.4 |
| ACGA58 | 1580.2 | h i j k l m n o p | 34.1 | 39.7 | 4.8 | 34.1 | 1.24 | 84.4 |
| ACGA46 | 1575.3 | h i j k l m n o p | 35.1 | 39.0 | 5.3 | 34.0 | 1.23 | 84.4 |
| ACGA53 | 1569.8 | i j k l m n o p | 39.9 | 37.3 | 5.3 | 28.8 | 1.17 | 82.6 |
| ACGA76 | 1544.9 | j k l m n o p | 41.1 | 38.3 | 5.2 | 33.3 | 1.19 | 84.0 |
| ACGA50 | 1538.4 | k l m n o p | 33.9 | 38.0 | 5.0 | 30.3 | 1.19 | 81.7 |
| ACGA51 | 1535.0 | k l m n o p | 35.8 | 38.7 | 4.8 | 31.4 | 1.21 | 81.9 |
| ACGA71 | 1522.0 | l m n o p | 35.2 | 37.7 | 4.7 | 32.8 | 1.18 | 84.2 |
| ACGA56 | 1511.8 | m n o p | 34.9 | 39.3 | 4.8 | 33.7 | 1.22 | 83.6 |
| ACGA77 | 1496.3 | n o p | 41.2 | 38.0 | 5.3 | 30.6 | 1.19 | 83.8 |
| ACGA52 | 1435.4 | o p | 38.2 | 38.3 | 4.7 | 31.4 | 1.21 | 83.4 |
| ACGA67 | 1389.6 | p | 32.7 | 39.7 | 5.3 | 34.4 | 1.25 | 84.1 |
| LSD§ | 277.9 | | 3 | 1.2 | 0.3 | 2.2 | 0.03 | 1.2 |
| OSL† | 0.0001 | | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| CV‡ | 9.7 | | 4.8 | 1.9 | 4.2 | 4.2 | 1.8 | 0.9 |

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Table 3. End of season plant measurement data, average seedcotton weight per boll, premium/discount and crop value, Yuma, AZ, 2005.

| Strain | Final Plant Height (in.) | Average First Fruiting Branch | Number of Mainstem Nodes | Average Seecotton Weight per Boll | Points Premium/Discount | Crop Value \$/acre |
|----------|-----------------------------|----------------------------------|-----------------------------|--------------------------------------|----------------------------|-----------------------|
| ACGA20 | 59.5 | 7.3 | 34.0 | 4.3 | 332 | 1024 |
| ACGA24 | 62.1 | 6.5 | 28.8 | 5.3 | 375 | 1094 |
| ACGA45 | 62.8 | 8.5 | 32.0 | 5.7 | 365 | 980 |
| ACGA46 | 64.5 | 6.5 | 32.5 | 5.1 | 328 | 871 |
| ACGA47 | 57.5 | 7.0 | 34.5 | 5.5 | 305 | 1048 |
| ACGA48 | 61.7 | 6.8 | 31.0 | 5.5 | 467 | 1082 |
| ACGA49 | 50.8 | 7.8 | 27.5 | 4.9 | 473 | 899 |
| ACGA50 | 58.9 | 6.8 | 30.0 | 4.4 | 530 | 886 |
| ACGA51 | 57.2 | 6.3 | 29.8 | 4.8 | 655 | 899 |
| ACGA52 | 54.5 | 6.0 | 30.8 | 4.5 | 683 | 845 |
| ACGA53 | 58.1 | 7.3 | 34.5 | 4.5 | 263 | 857 |
| ACGA54 | 64.1 | 6.3 | 35.0 | 4.8 | 580 | 1083 |
| ACGA55 | 60.5 | 7.3 | 32.5 | 5.1 | 372 | 956 |
| ACGA56 | 59.0 | 7.3 | 36.0 | 5.8 | 580 | 874 |
| ACGA57 | 60.0 | 7.0 | 35.0 | 5.1 | 445 | 1057 |
| ACGA58 | 68.0 | 8.5 | 35.0 | 4.5 | 418 | 888 |
| ACGA59 | 60.4 | 6.3 | 31.5 | 4.9 | 348 | 1013 |
| ACGA60 | 59.5 | 7.0 | 31.3 | 5.8 | 478 | 927 |
| ACGA61 | 53.9 | 6.8 | 26.0 | 6.0 | 577 | 987 |
| ACGA62 | 59.3 | 6.5 | 32.8 | 5.7 | 270 | 1076 |
| ACGA63 | 58.8 | 7.3 | 37.3 | 5.4 | 555 | 1081 |
| ACGA64 | 60.9 | 6.5 | 31.5 | 5.4 | 687 | 954 |
| ACGA65 | 63.9 | 8.0 | 31.8 | 4.6 | 367 | 1080 |
| ACGA66 | 61.9 | 7.5 | 31.5 | 5.3 | 420 | 1068 |
| ACGA67 | 65.2 | 5.8 | 38.3 | 5.6 | 323 | 767 |
| ACGA68 | 62.0 | 7.8 | 37.5 | 5.4 | 360 | 1069 |
| ACGA69 | 61.4 | 7.3 | 33.3 | 5.3 | 330 | 966 |
| ACGA70 | 63.4 | 8.0 | 34.0 | 5.3 | 443 | 1007 |
| ACGA71 | 63.1 | 7.3 | 34.3 | 5.6 | 682 | 895 |
| ACGA72 | 61.7 | 7.8 | 35.8 | 5.6 | 568 | 1106 |
| ACGA73 | 57.8 | 6.5 | 31.5 | 5.1 | 480 | 989 |
| ACGA74 | 54.9 | 5.8 | 32.0 | 5.6 | 362 | 1003 |
| ACGA75 | 70.8 | 7.5 | 34.5 | 5.9 | 578 | 1032 |
| ACGA76 | 60.7 | 6.8 | 30.5 | 4.8 | 337 | 855 |
| ACGA77 | 52.9 | 6.5 | 32.8 | 5.2 | 348 | 830 |
| ACGA78 | 60.7 | 6.8 | 31.0 | 5.4 | 582 | 1140 |
| ACGA79 | 53.2 | 7.0 | 29.3 | 5.5 | 467 | 1160 |
| ACGA80 | 58.3 | 7.0 | 33.3 | 5.7 | 690 | 959 |
| ACGA81 | 48.5 | 5.8 | 32.0 | 4.9 | 653 | 1054 |
| ACGA82 | 55.4 | 7.0 | 31.0 | 5.2 | 423 | 1037 |
| ACGA83 | 52.9 | 5.8 | 29.3 | 4.7 | 702 | 1017 |
| DP448B | 53.5 | 6.3 | 29.0 | 5.2 | 353 | 1180 |
| DP449BR | 58.9 | 6.8 | 33.5 | 5.2 | 572 | 1052 |
| ST5599BR | 61.0 | 7.5 | 35.8 | 5.7 | 197 | 1174 |

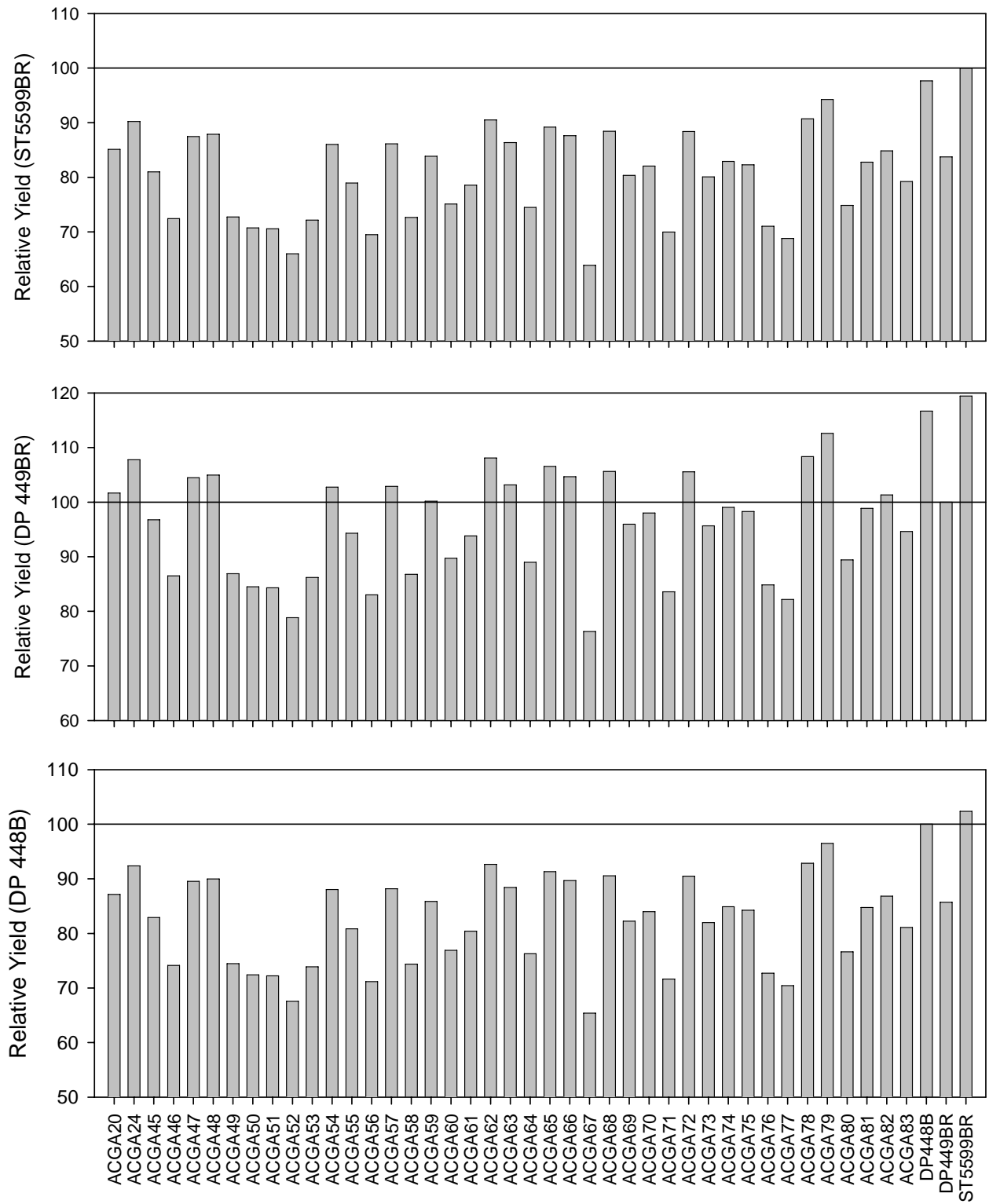


Figure 1. Percent relative lint yield for each of the ACGA strain entries. Relative lint yield was calculated by dividing the mean yield of the strain by mean lint yield of each of the commercial variety controls in this trial (a) ST5599BR, (b) DP449BR and (c) DP448B at Yuma, AZ, 2005.

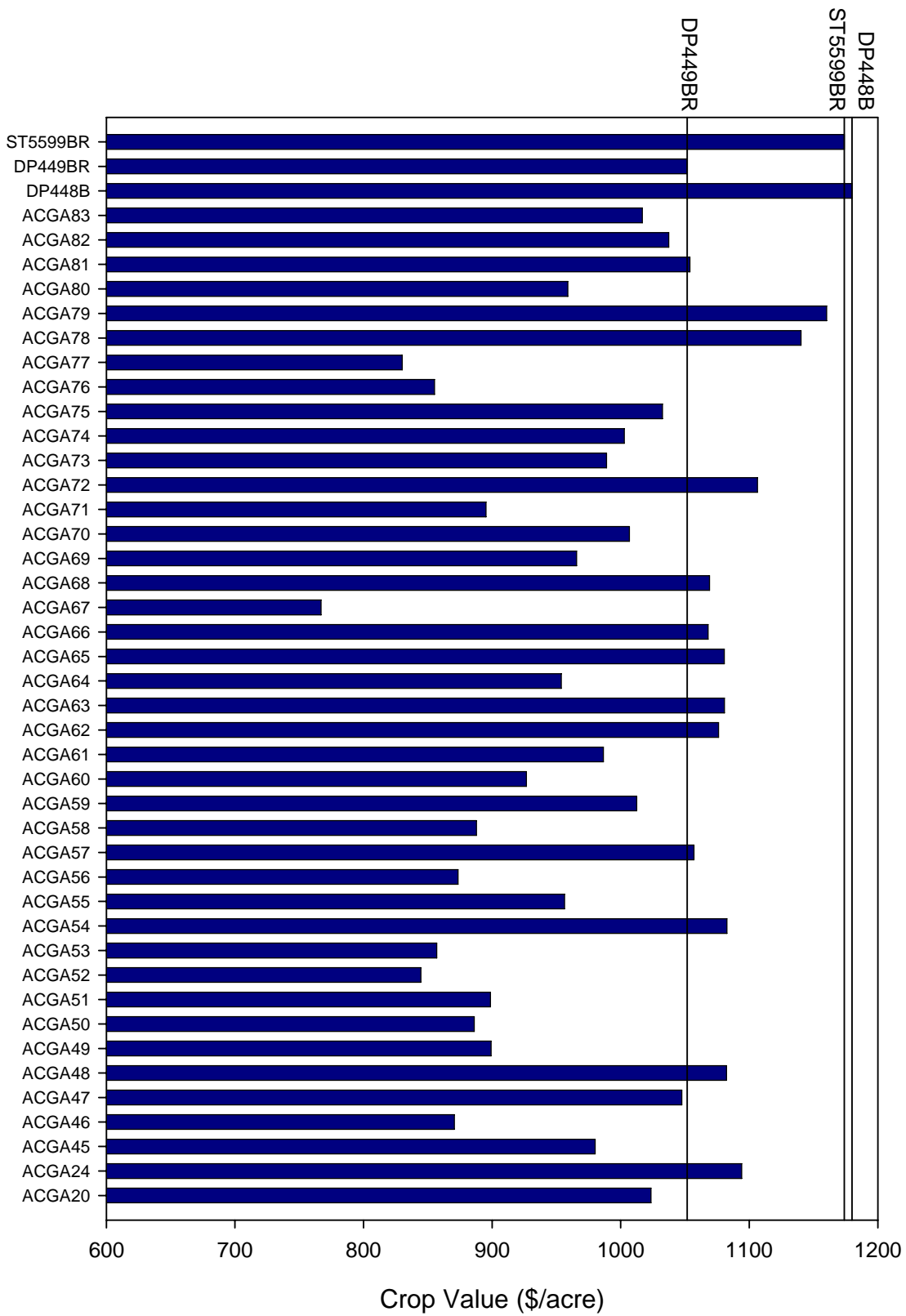


Figure 2. Points associated with the premium and discounts based upon fiber quality characteristics for each ACGA strain. Points were determined using the 2005 CCC loan schedule for Upland cotton. Vertical lines indicate points level for each commercial variety control. Data from Yuma, AZ, 2005.

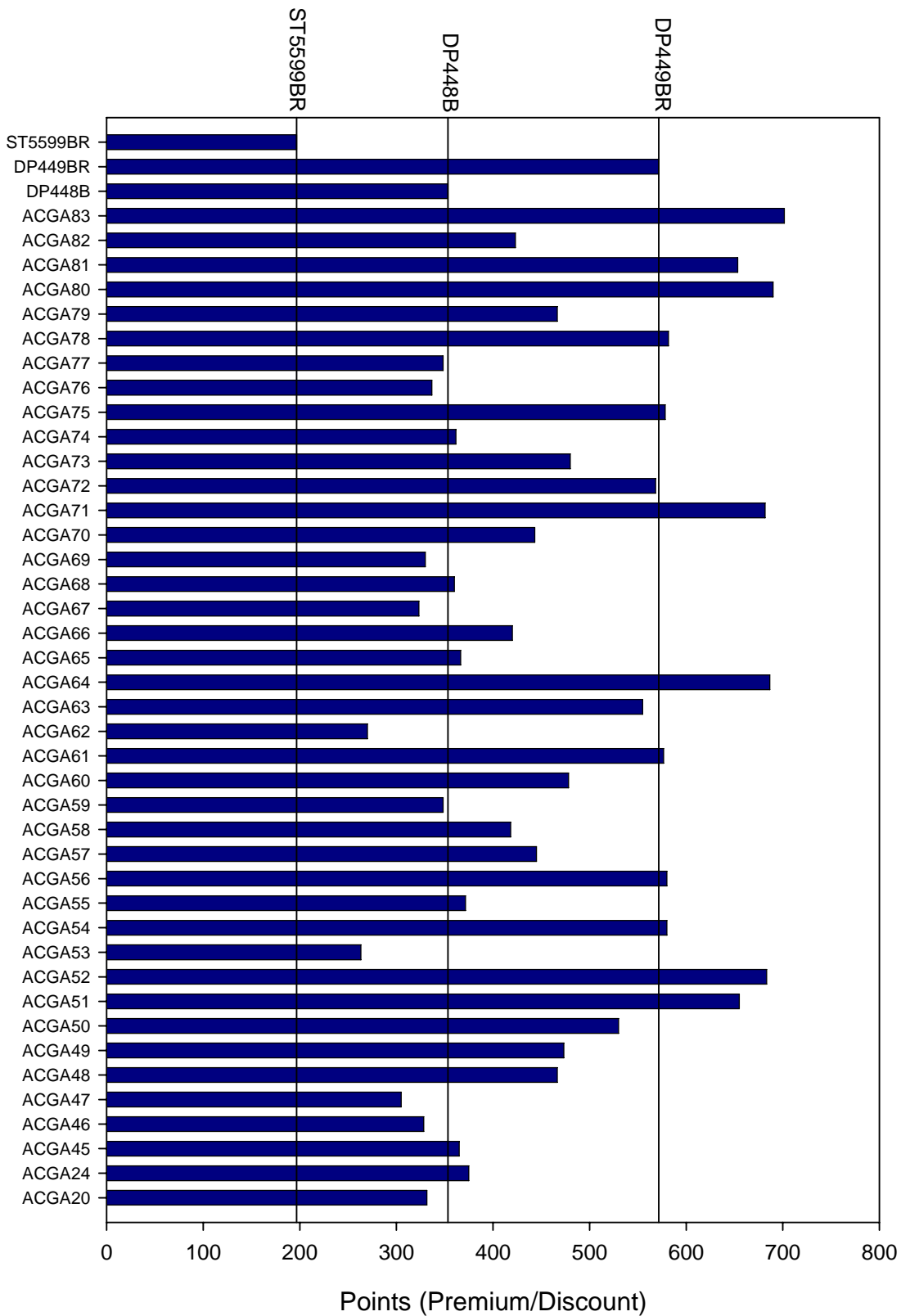


Figure 3. Total crop value for each ACGA strain. Final crop price was calculated from a base price of 52.00 cents/pound plus premiums/discounts for fiber quality. Total crop value was calculated by multiplying the final price by lint yield. Vertical lines indicate crop value levels for each commercial variety control. Data from Yuma, AZ, 2005.

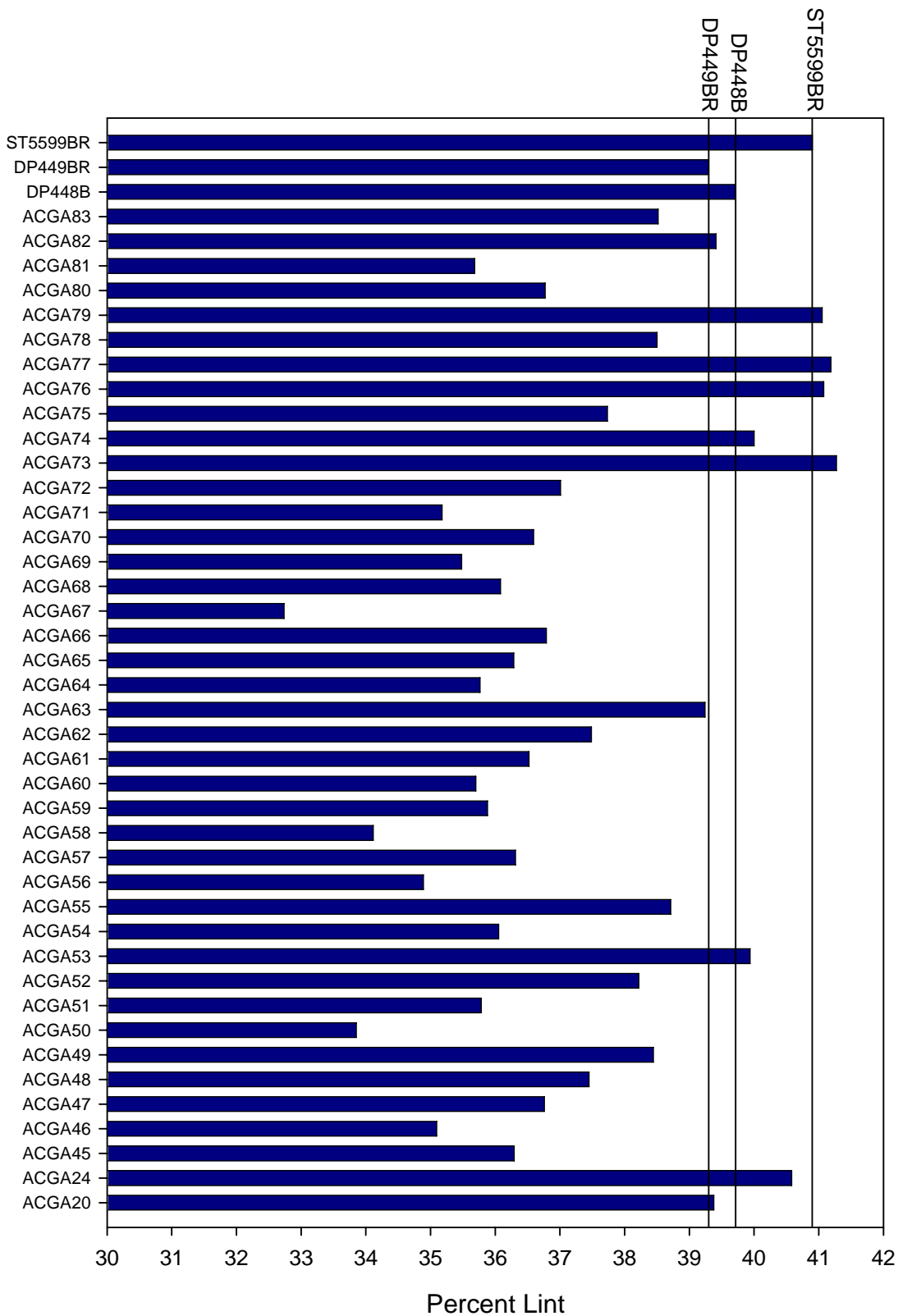


Figure 4. Percent lint for each ACGA strain. Percent lint was determined by ginning a 50 boll sample from each experimental unit. Vertical lines indicate percent lint levels for each commercial variety control. Data from Yuma, AZ, 2005.

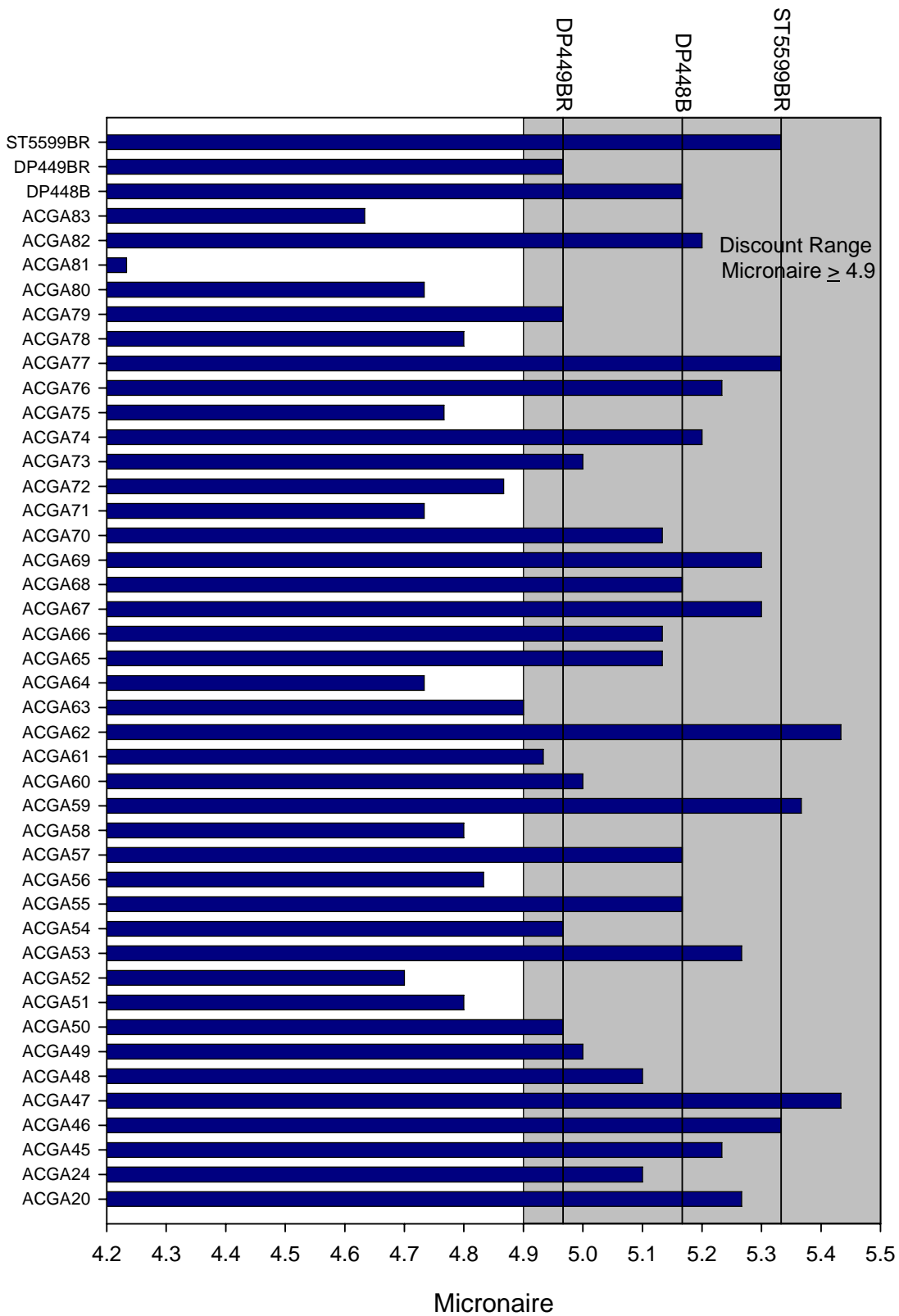


Figure 5. Fiber micronaire values for each ACGA strain. Discount range for fiber micronaire is indicated by grey box. Vertical lines indicate micronaire levels for each commercial variety control. Data from Yuma, AZ, 2005.

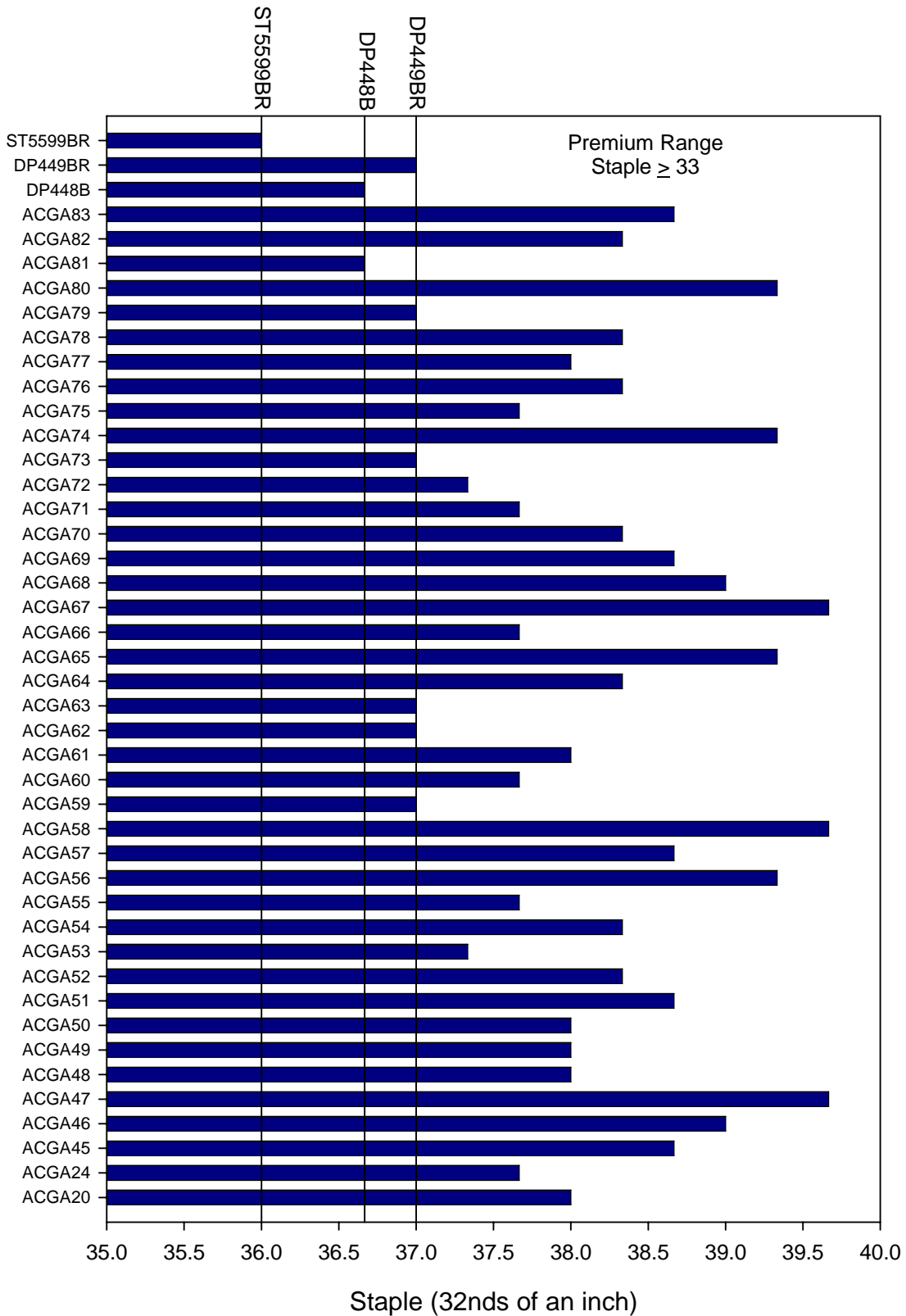


Figure 6. Fiber staple (32nds) values for each ACGA strain. All entered strains fell in the premium range for fiber staple. Vertical lines indicate staple levels for each commercial variety control. Data from Yuma, AZ, 2005.

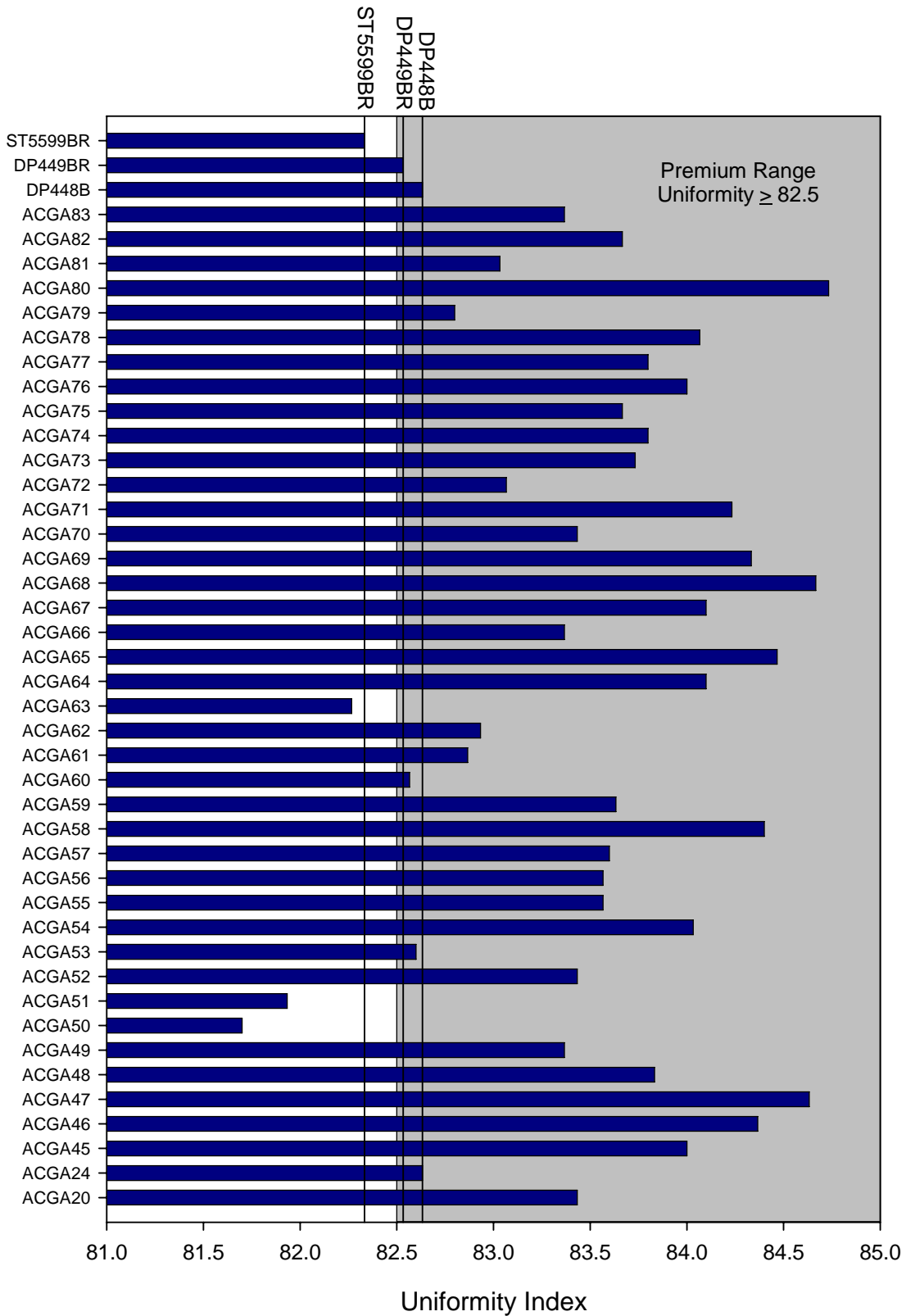


Figure 7. Fiber uniformity index values for each ACGA strain. Premium range for fiber uniformity is indicated by grey box. Vertical lines indicate uniformity levels for each commercial variety control. Data from Yuma, AZ, 2005.

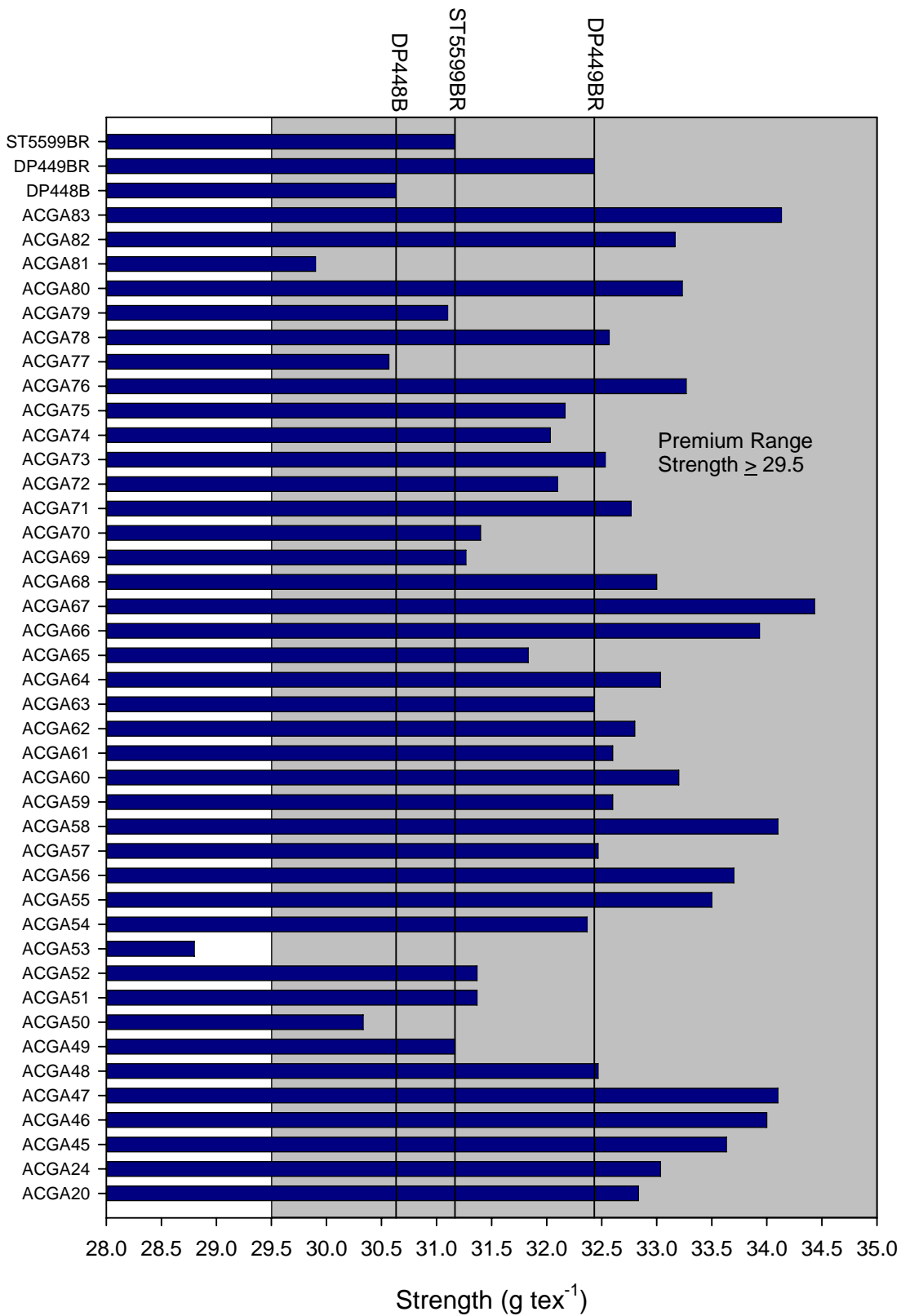


Figure 8. Fiber strength (g tex^{-1}) values for each ACGA strain. Premium range for fiber strength is indicated by grey box. Vertical lines indicate strength levels for each commercial variety control. Data from Yuma, AZ, 2005.

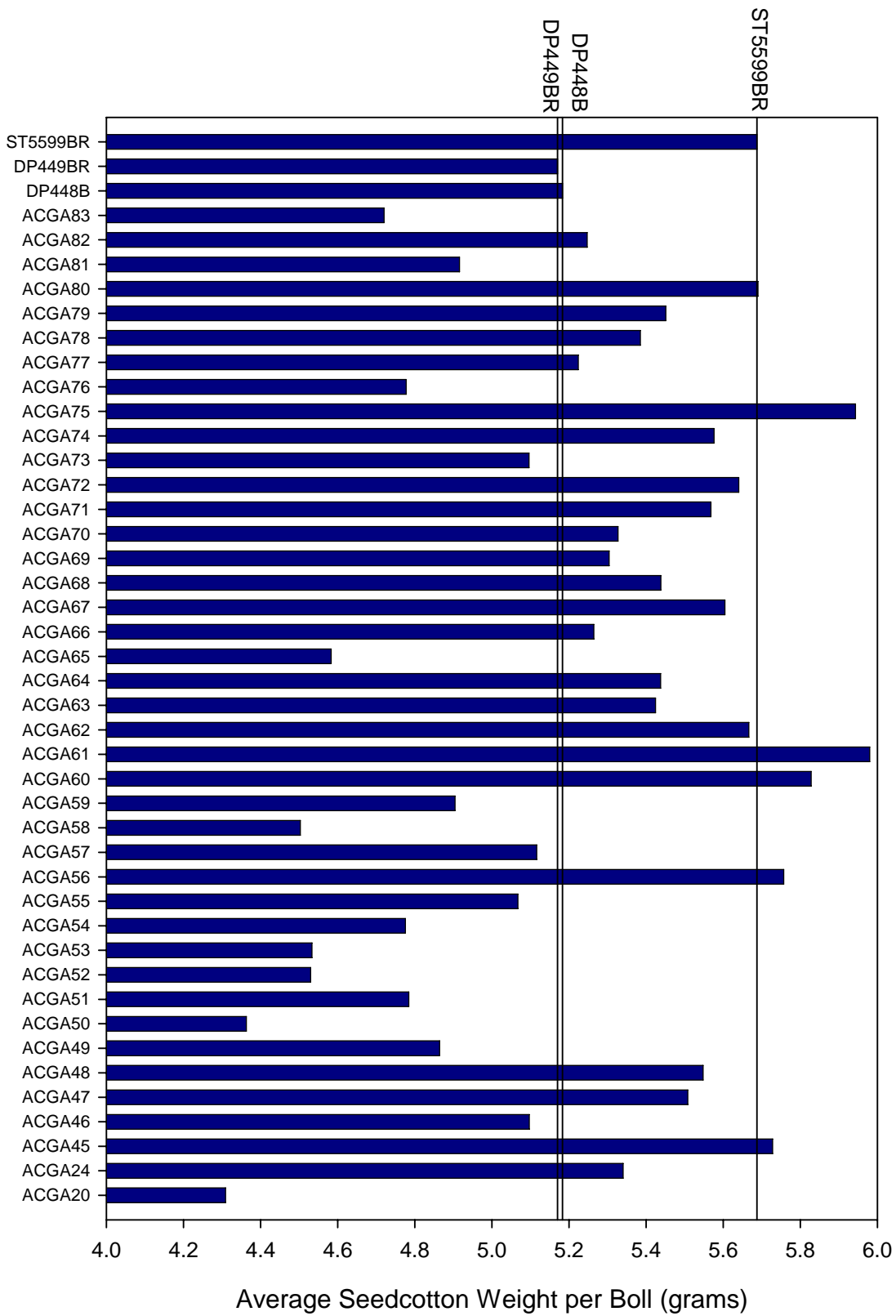


Figure 9. Average seedcotton weight (grams) per boll for each ACGA strain. Vertical lines indicate weight levels for each commercial variety control. Data from Yuma, AZ, 2005.

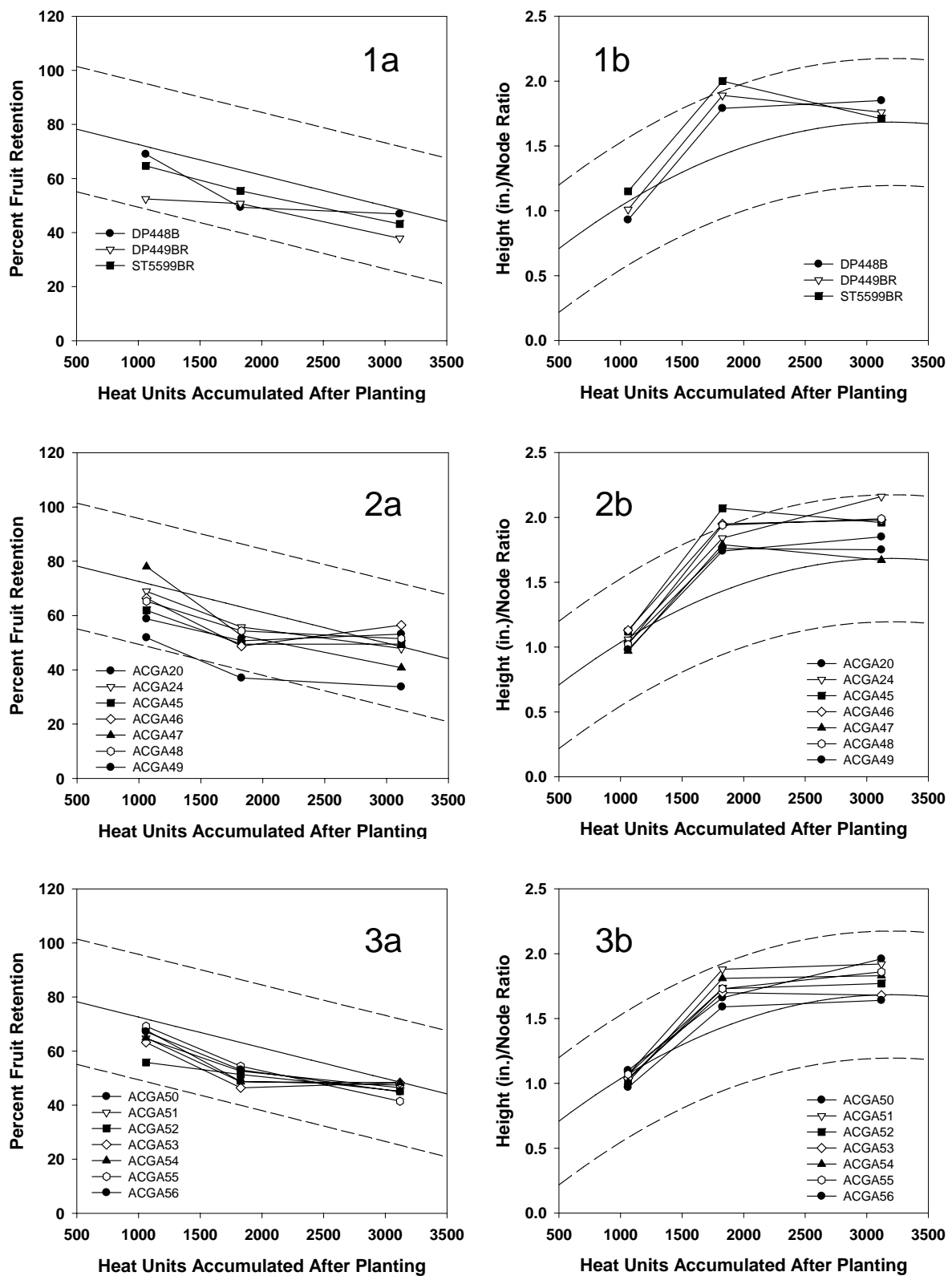


Figure 10. Percent fruit retention (a) and height to node ratio (b) levels for the control varieties (1) and ACGA (2 and 3) advanced strains planted at Yuma, AZ, 2005. The data are plotted as a function of heat units accumulated after planting. Solid and dotted lines represent baseline and upper/lower confidence intervals respectively for the two parameters.

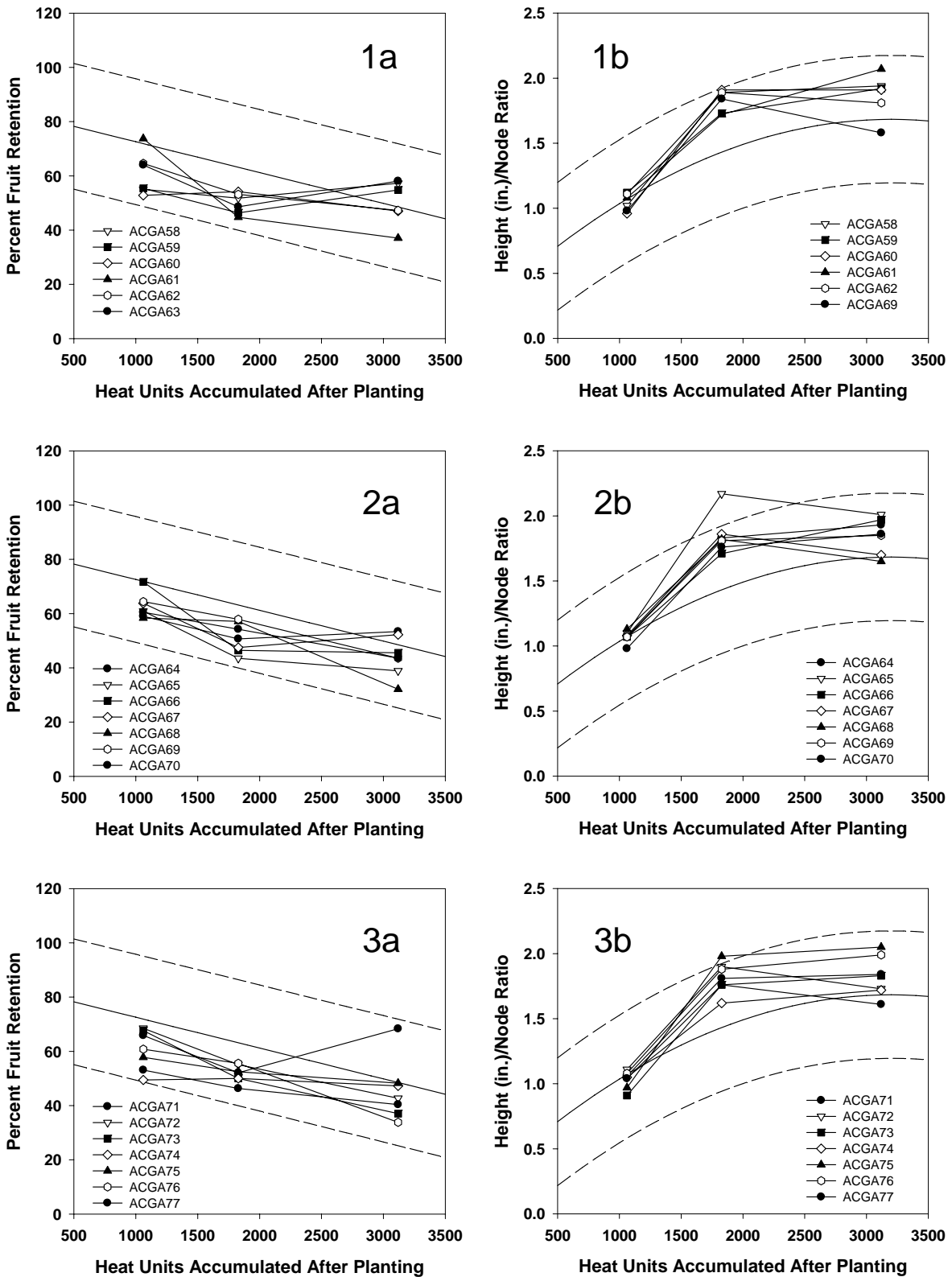


Figure 11. Percent fruit retention (a) and height to node ratio (b) levels for the control varieties (1) and AC GA (2 and 3) advanced strains planted at Yuma, AZ, 2005. The data are plotted as a function of heat units accumulated after planting. Solid and dotted lines represent baseline and upper/lower confidence intervals respectively for the two parameters.

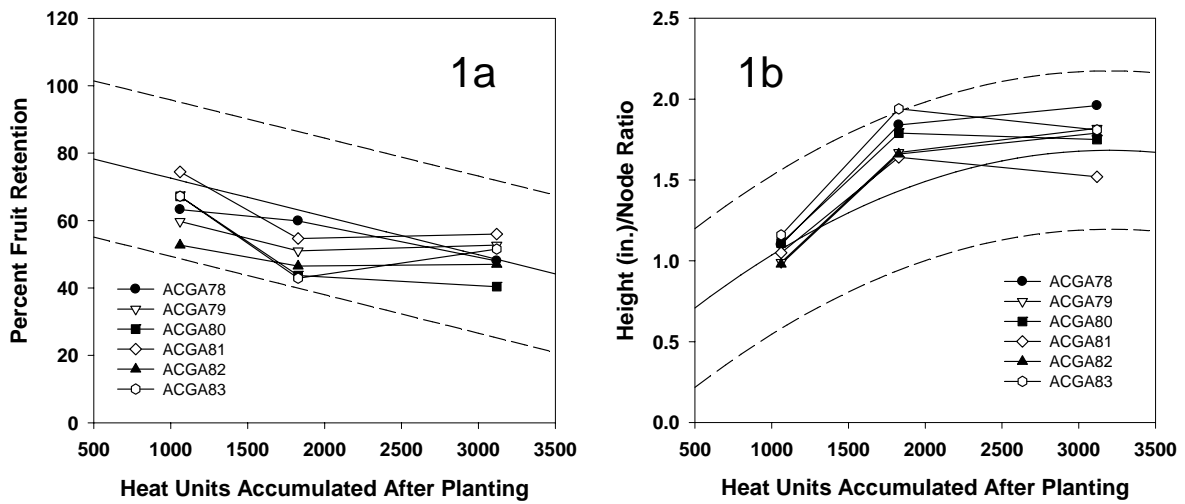


Figure 12. Percent fruit retention (a) and height to node ratio (b) levels for the control varieties (1) and ACGA (2 and 3) advanced strains planted at Yuma, AZ, 2005. The data are plotted as a function of heat units accumulated after planting. Solid and dotted lines represent baseline and upper/lower confidence intervals respectively for the two parameters.

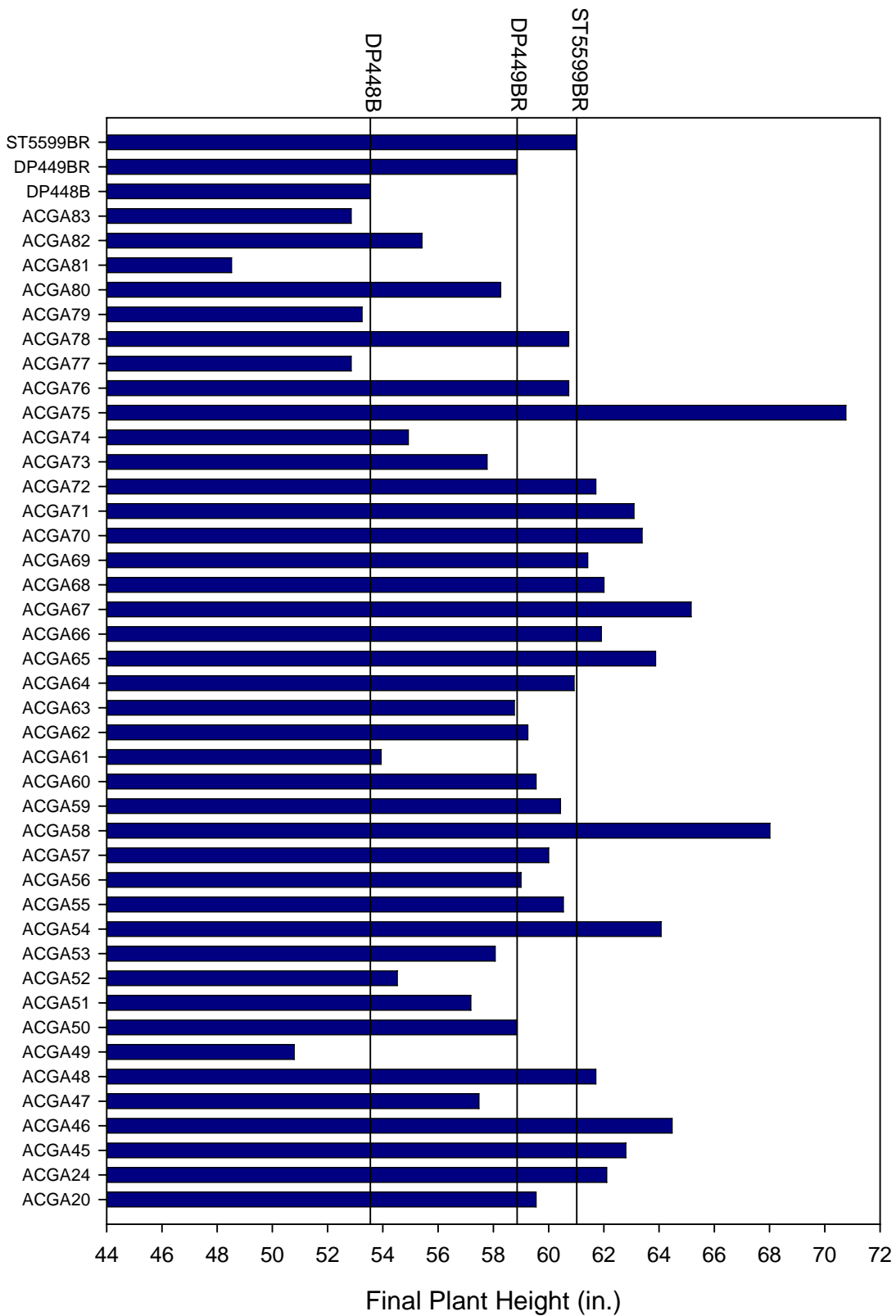


Figure 13. Average final plant height for each ACGA strain. Vertical lines indicate height levels for each commercial variety control. Data from Yuma, AZ, 2005.

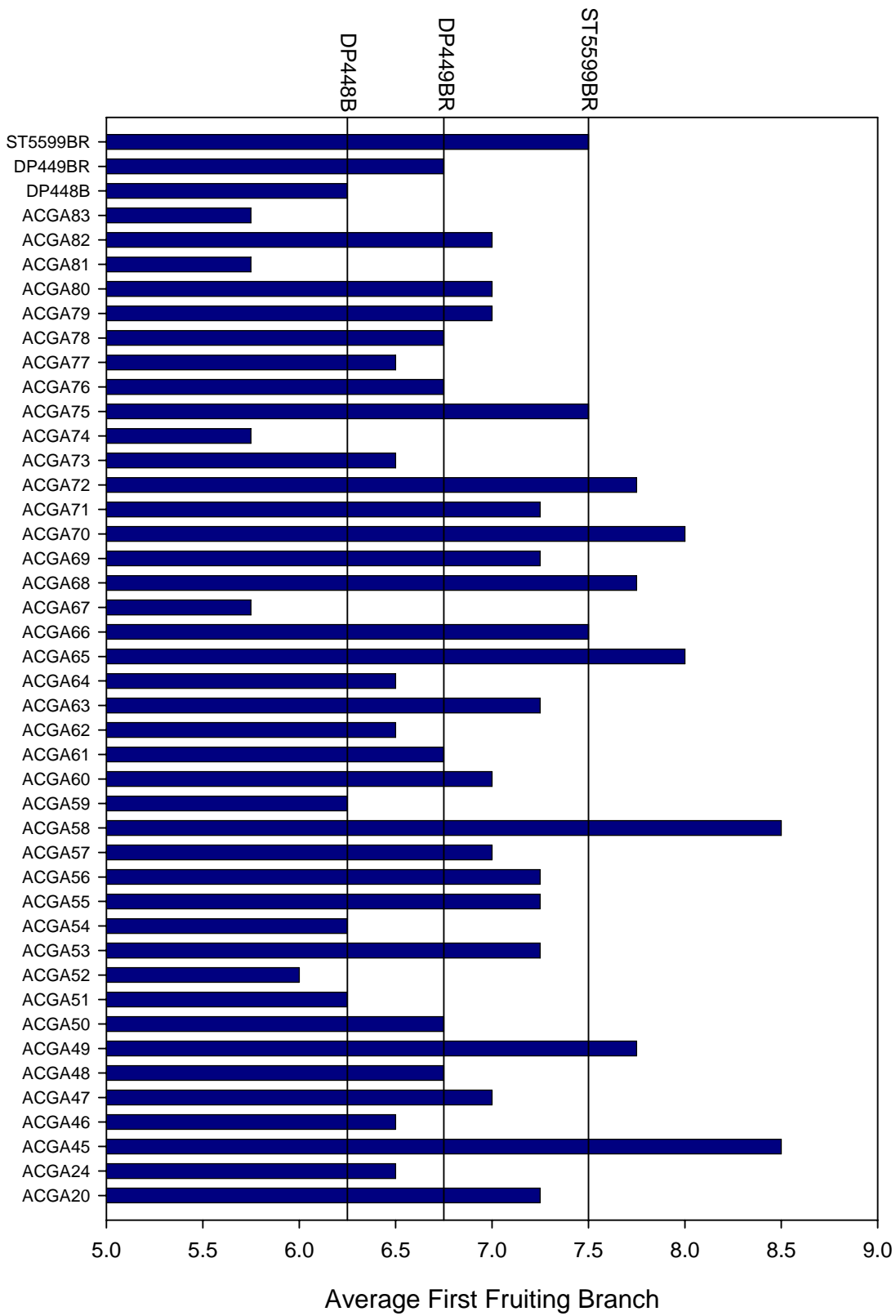


Figure 14. Average first fruiting branch for each ACGA strain. Vertical lines indicate first fruiting branch levels for each commercial variety control. Data from Yuma, AZ, 2005.

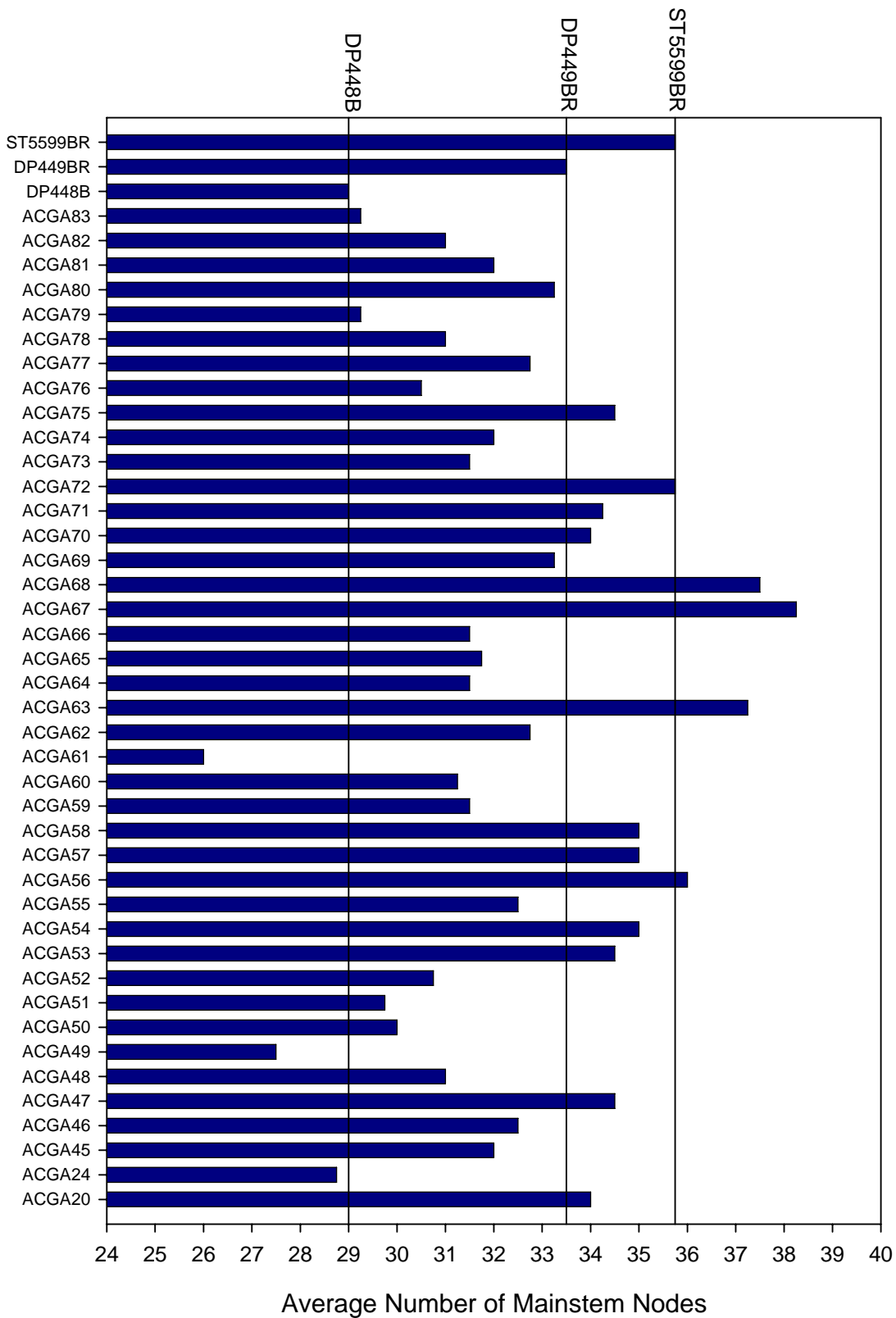


Figure 15. Average total number of mainstem nodes for each ACGA strain. Vertical lines indicate mainstem node numbers for each commercial variety control. Data from Yuma, AZ, 2005.

Table 4. Lint yield and fiber quality results for the ACGA preliminary strains evaluation at Maricopa, AZ, 2005.

| Strain | Seed Cotton | Means Separation* | Percent | Staple | Micronaire | Strength | Length | Uniformity |
|----------|-------------|-------------------|---------|--------|------------|----------|--------|------------|
| | lbs/acre | | Lint | 32nds | | g/tex | inches | |
| ACGA82 | 1463.3 | a | 41.7 | 37.7 | 4.8 | 36.2 | 1.18 | 83.2 |
| ACGA68 | 1388.0 | a b | 35.1 | 38.0 | 5.5 | 36.3 | 1.19 | 84.2 |
| ACGA70 | 1386.1 | a b | 35.1 | 38.3 | 5.2 | 35.3 | 1.20 | 82.9 |
| ACGA72 | 1363.5 | a b | 35.5 | 36.5 | 5.2 | 33.7 | 1.13 | 82.3 |
| ACGA74 | 1359.1 | a b c | 43.5 | 36.3 | 5.3 | 28.3 | 1.13 | 81.1 |
| ACGA65 | 1345.9 | a b c d | 33.3 | 38.3 | 5.1 | 36.0 | 1.20 | 83.7 |
| ACGA64 | 1327.8 | a b c d e | 36.8 | 36.7 | 5.2 | 33.8 | 1.15 | 82.8 |
| ACGA75 | 1327.5 | a b c d e | 33.8 | 36.3 | 5.2 | 33.2 | 1.13 | 82.6 |
| ACGA67 | 1310.8 | a b c d e | 34.2 | 38.3 | 5.6 | 36.1 | 1.20 | 83.5 |
| ACGA47 | 1299.7 | a b c d e f | 33.3 | 37.5 | 5.5 | 34.9 | 1.17 | 83.3 |
| ACGA66 | 1287.8 | a b c d e f | 37.4 | 36.7 | 5.1 | 35.3 | 1.15 | 81.7 |
| ACGA53 | 1277.4 | a b c d e f | 42.1 | 36.0 | 5.1 | 30.9 | 1.13 | 81.5 |
| ACGA46 | 1273.6 | a b c d e f | 33.6 | 37.3 | 5.6 | 34.2 | 1.17 | 81.3 |
| ACGA57 | 1270.1 | a b c d e f | 35.8 | 37.5 | 5.1 | 34.7 | 1.17 | 83.5 |
| ACGA54 | 1260.5 | a b c d e f g | 34.4 | 37.3 | 5.3 | 35.4 | 1.17 | 83.6 |
| ACGA45 | 1257.4 | a b c d e f g | 34.7 | 38.3 | 5.6 | 35.1 | 1.20 | 83.5 |
| DP448B | 1246.7 | a b c d e f g | 37.4 | 36.3 | 4.8 | 32.0 | 1.13 | 82.1 |
| ACGA77 | 1240.7 | a b c d e f g | 41.8 | 36.5 | 5.1 | 34.8 | 1.13 | 82.5 |
| ACGA55 | 1226.6 | b c d e f g | 36.9 | 37.0 | 5.1 | 34.6 | 1.16 | 83.8 |
| ACGA69 | 1219.5 | b c d e f g | 34.6 | 38.0 | 5.5 | 34.8 | 1.19 | 83.6 |
| ACGA24 | 1213.3 | b c d e f g h | 40.2 | 36.8 | 5.1 | 32.3 | 1.15 | 81.7 |
| ACGA52 | 1199.3 | b c d e f g h i | 39.3 | 37.0 | 5.0 | 31.1 | 1.15 | 82.2 |
| ACGA63 | 1192.8 | b c d e f g h i | 38.2 | 37.3 | 4.9 | 33.5 | 1.15 | 82.1 |
| ACGA76 | 1190.1 | b c d e f g h i | 42.9 | 37.3 | 5.0 | 33.0 | 1.17 | 82.6 |
| DP449BR | 1188.0 | b c d e f g h i | 35.8 | 36.0 | 5.2 | 32.5 | 1.12 | 82.8 |
| ACGA20 | 1184.3 | b c d e f g h i j | 37.1 | 37.0 | 5.3 | 34.0 | 1.15 | 83.5 |
| ACGA62 | 1165.3 | b c d e f g h i j | 35.4 | 36.5 | 5.3 | 35.3 | 1.14 | 82.1 |
| ACGA71 | 1164.7 | b c d e f g h i j | 34.2 | 36.8 | 4.9 | 33.9 | 1.15 | 83.1 |
| ACGA79 | 1164.3 | b c d e f g h i j | 38.3 | 36.0 | 5.1 | 32.1 | 1.12 | 82.4 |
| ACGA59 | 1129.1 | c d e f g h i j | 34.8 | 36.5 | 5.2 | 35.1 | 1.14 | 82.1 |
| ACGA61 | 1128.1 | d e f g h i j | 33.6 | 37.3 | 5.1 | 35.0 | 1.16 | 83.2 |
| ACGA73 | 1104.6 | e f g h i j | 38.4 | 35.3 | 4.9 | 31.5 | 1.10 | 82.2 |
| ACGA56 | 1078.0 | f g h i j | 32.8 | 38.0 | 4.9 | 35.9 | 1.20 | 83.4 |
| ACGA48 | 1071.2 | f g h i j k | 32.1 | 36.8 | 5.1 | 34.2 | 1.14 | 82.6 |
| ACGA60 | 1033.1 | g h i j k l | 33.5 | 36.8 | 5.2 | 35.6 | 1.14 | 82.3 |
| ACGA78 | 1030.8 | g h i j k l | 34.8 | 36.0 | 4.9 | 33.4 | 1.13 | 82.6 |
| ACGA49 | 987.7 | h i j k l m | 35.2 | 37.0 | 4.8 | 34.2 | 1.16 | 83.5 |
| ST5599BR | 983.7 | h i j k l m | 39.6 | 34.8 | 4.9 | 31.6 | 1.08 | 82.1 |
| ACGA58 | 978.0 | i j k l m | 33.2 | 37.7 | 4.8 | 34.6 | 1.18 | 83.8 |
| ACGA83 | 956.8 | j k l m | 38.5 | 36.5 | 4.7 | 34.5 | 1.14 | 82.1 |
| ACGA51 | 847.7 | k l m | 40.3 | 37.0 | 4.9 | 31.0 | 1.16 | 80.5 |
| ACGA81 | 823.8 | l m | 34.7 | 35.7 | 4.5 | 32.6 | 1.11 | 82.0 |
| ACGA80 | 809.5 | l m | 34.4 | 36.3 | 4.8 | 35.2 | 1.14 | 82.4 |
| ACGA50 | 795.3 | m | 38.3 | 37.0 | 5.0 | 33.1 | 1.15 | 81.6 |
| LSD§ | 213.4 | | 0.04 | 1.3 | 0.33 | 2.4 | 0.04 | 1.9 |
| OSL† | 0.0001 | | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0748 |
| CV‡ | 14.0 | | 8.3 | 2.5 | 4.5 | 4.8 | 2.4 | 1.6 |

*Means followed by the same letter are not statistically different according to a Fisher's least significant difference means separation test.

§ Least Significant Difference

† Observed Significance Level

‡ Coefficient of Variation

Table 5. End of season plant measurement data, average seedcotton weight per boll, premium/discount and crop value, Maricopa, AZ, 2005.

| Strain | Final Plant Height (in.) | Average First Fruiting Branch | Number of Mainstem Nodes | Average Seecotton Weight per Boll | Points Premium/Discount | Crop Value \$/acre |
|----------|-----------------------------|----------------------------------|-----------------------------|--------------------------------------|----------------------------|-----------------------|
| ACGA20 | 31.1 | 6.8 | 26.8 | 3.6 | 206 | 564 |
| ACGA24 | 33.7 | 7.8 | 27.0 | 3.4 | 339 | 599 |
| ACGA45 | 42.3 | 7.5 | 27.3 | 3.6 | 246 | 598 |
| ACGA46 | 47.3 | 6.8 | 30.3 | 3.4 | 118 | 591 |
| ACGA47 | 44.8 | 5.5 | 27.5 | 3.8 | 103 | 601 |
| ACGA48 | 41.7 | 6.8 | 30.3 | 3.7 | 148 | 499 |
| ACGA49 | 35.0 | 5.8 | 28.0 | 3.6 | 576 | 500 |
| ACGA50 | 36.4 | 6.3 | 25.5 | 2.8 | 364 | 390 |
| ACGA51 | 39.4 | 5.0 | 29.8 | 2.9 | 242 | 411 |
| ACGA52 | 40.9 | 7.0 | 29.5 | 2.9 | 313 | 586 |
| ACGA53 | 40.9 | 7.3 | 32.5 | 3.1 | 178 | 615 |
| ACGA54 | 44.3 | 9.0 | 30.8 | 3.5 | 239 | 598 |
| ACGA55 | 44.0 | 7.5 | 29.0 | 2.9 | 335 | 598 |
| ACGA56 | 44.3 | 8.0 | 30.8 | 3.6 | 369 | 521 |
| ACGA57 | 42.4 | 7.0 | 24.8 | 3.0 | 153 | 599 |
| ACGA58 | 47.2 | 6.5 | 31.0 | 2.7 | 230 | 460 |
| ACGA59 | 38.2 | 6.8 | 28.8 | 3.5 | 338 | 547 |
| ACGA60 | 43.8 | 7.0 | 25.0 | 3.4 | 185 | 486 |
| ACGA61 | 43.5 | 7.3 | 27.5 | 3.5 | 413 | 553 |
| ACGA62 | 39.1 | 7.0 | 24.8 | 3.2 | 210 | 556 |
| ACGA63 | 40.7 | 6.5 | 27.5 | 3.7 | 428 | 592 |
| ACGA64 | 38.0 | 7.0 | 30.8 | 3.5 | 308 | 645 |
| ACGA65 | 44.5 | 7.0 | 26.5 | 3.5 | 228 | 638 |
| ACGA66 | 42.4 | 8.5 | 31.3 | 2.9 | 307 | 622 |
| ACGA67 | 47.0 | 6.5 | 29.5 | 3.6 | 121 | 607 |
| ACGA68 | 43.2 | 6.5 | 27.5 | 3.6 | 141 | 648 |
| ACGA69 | 38.9 | 8.3 | 28.8 | 3.2 | 229 | 578 |
| ACGA70 | 42.4 | 8.3 | 31.8 | 3.8 | 203 | 660 |
| ACGA71 | 40.6 | 7.8 | 27.3 | 3.6 | 493 | 579 |
| ACGA72 | 39.9 | 6.8 | 26.3 | 3.7 | 208 | 646 |
| ACGA73 | 31.4 | 7.0 | 26.0 | 3.1 | -37 | 506 |
| ACGA74 | 29.4 | 8.0 | 28.5 | 3.7 | 153 | 622 |
| ACGA75 | 43.1 | 5.8 | 27.3 | 4.0 | 94 | 612 |
| ACGA76 | 45.2 | 8.0 | 29.5 | 2.9 | 465 | 602 |
| ACGA77 | 39.9 | 6.5 | 29.3 | 3.0 | 346 | 614 |
| ACGA78 | 40.3 | 8.3 | 32.3 | 3.4 | 578 | 520 |
| ACGA79 | 34.4 | 7.5 | 29.0 | 3.3 | 348 | 570 |
| ACGA80 | 35.7 | 7.0 | 23.3 | 3.9 | 56 | 372 |
| ACGA81 | 40.0 | 5.0 | 31.0 | 3.4 | 375 | 403 |
| ACGA82 | 39.7 | 7.0 | 31.5 | 2.9 | 418 | 679 |
| ACGA83 | 38.2 | 6.8 | 26.0 | 3.1 | 306 | 469 |
| DP448B | 39.9 | 7.3 | 26.0 | 3.2 | 421 | 621 |
| DP449BR | 34.7 | 7.3 | 28.3 | 3.5 | 165 | 560 |
| ST5599BR | 40.3 | 6.8 | 24.3 | 3.3 | 171 | 470 |

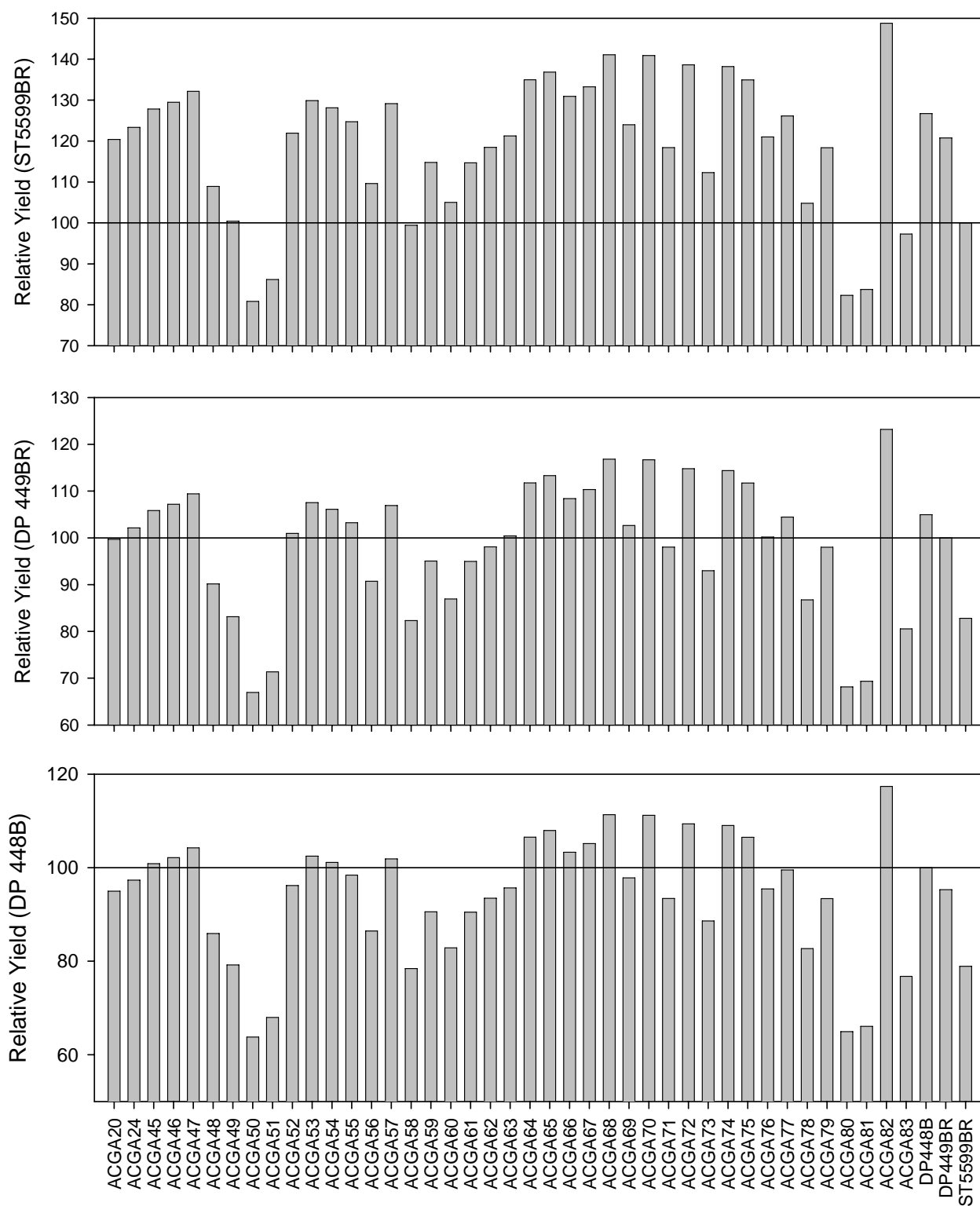


Figure 16. Percent relative lint yield for each of the ACGA strain entries. Relative lint yield was calculated by dividing the mean yield of the strain by mean lint yield of each of the commercial variety controls in this trial (a) ST5599BR, (b) DP449BR and (c) DP448B at Maricopa, AZ, 2005.

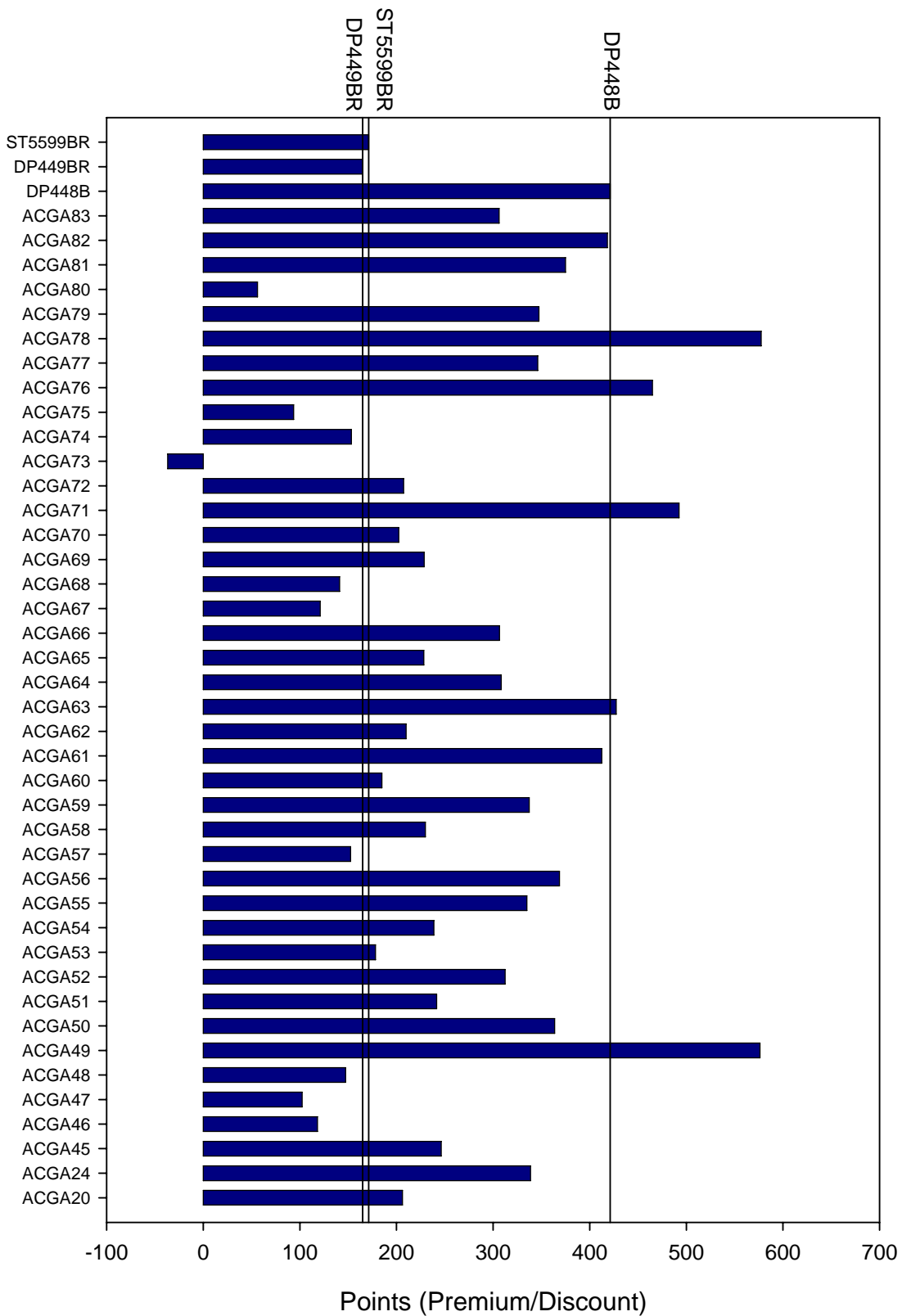


Figure 17. Points associated with the premium and discounts based upon fiber quality characteristics for each ACGA strain. Points were determined using the 2005 CCC loan schedule for Upland cotton. Vertical lines indicate points level for each commercial variety control. Data from Maricopa, AZ, 2005.

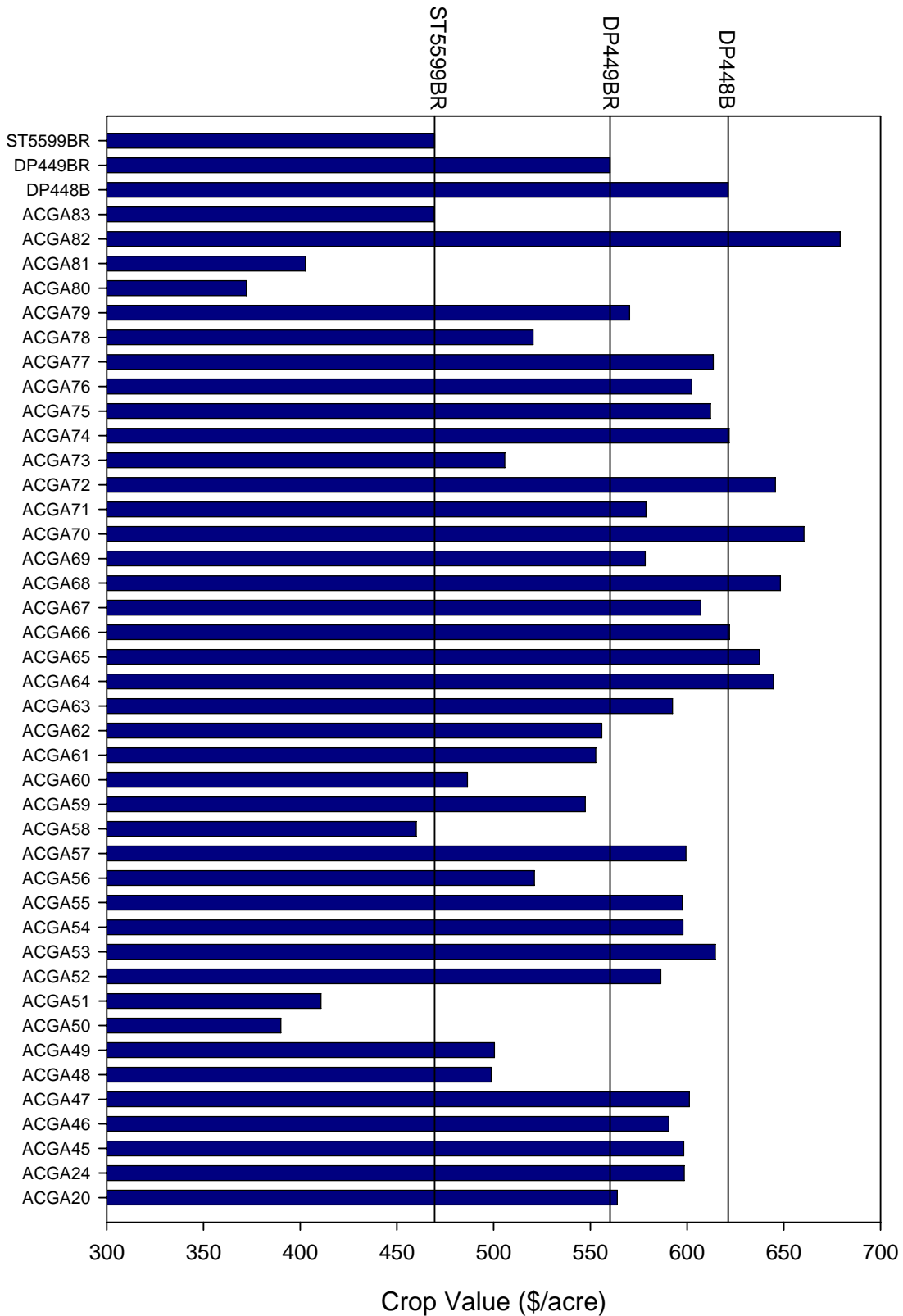


Figure 18. Total crop value for each ACGA strain. Final crop price was calculated from a base price of 52.00 cents/pound plus premiums/discounts for fiber quality. Total crop value was calculated by multiplying the final price by lint yield. Vertical lines indicate crop value levels for each commercial variety control. Data from Maricopa, AZ, 2005.

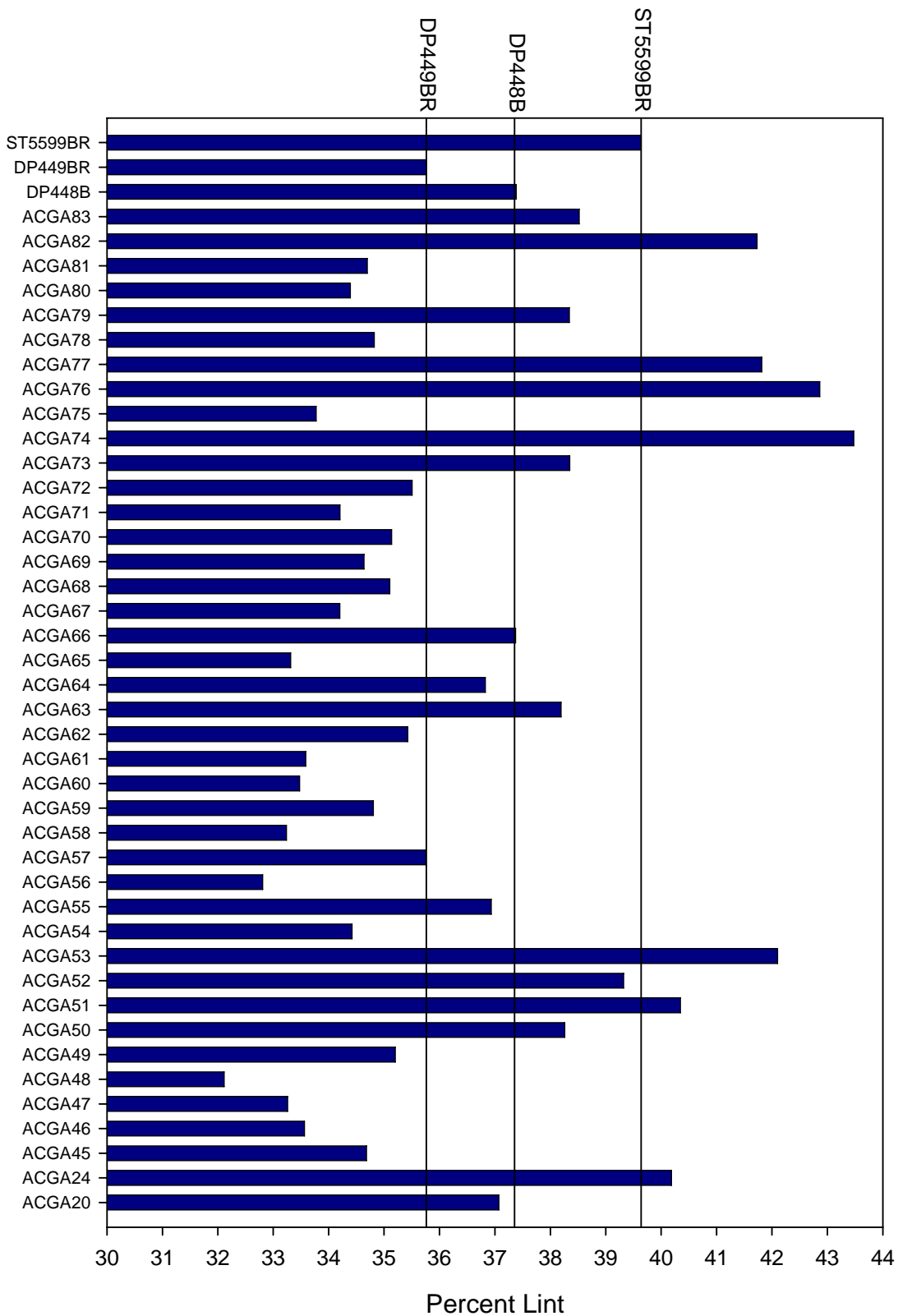


Figure 19. Percent lint for each ACGA strain. Percent lint was determined by ginning a 50 boll sample from each experimental unit. Vertical lines indicate percent lint levels for each commercial variety control. Data from Maricopa, AZ, 2005.

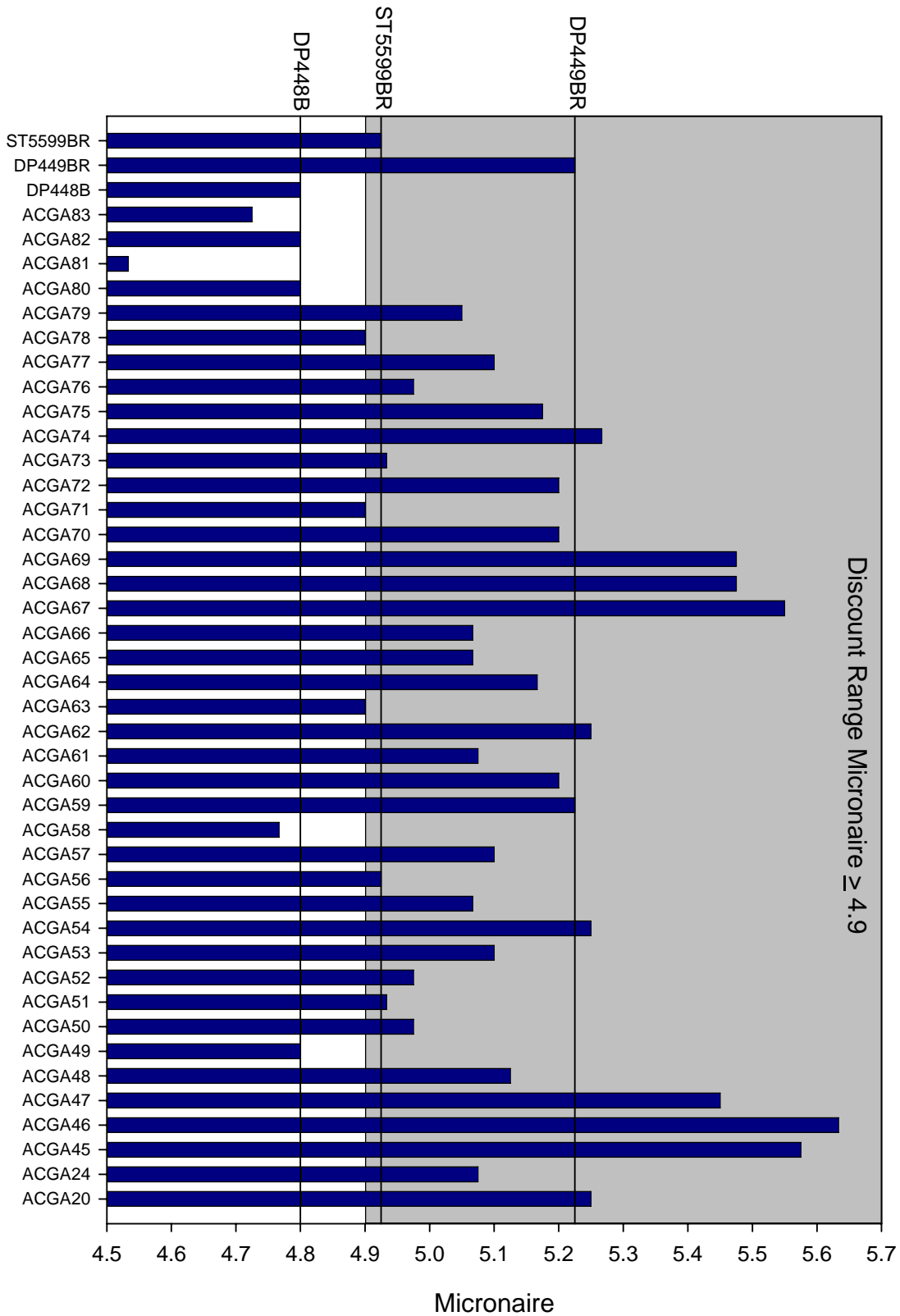


Figure 20. Fiber micronaire values for each ACGA strain. Discount range for fiber micronaire is indicated by grey box. Vertical lines indicate micronaire levels for each commercial variety control. Data from Maricopa, AZ, 2005.

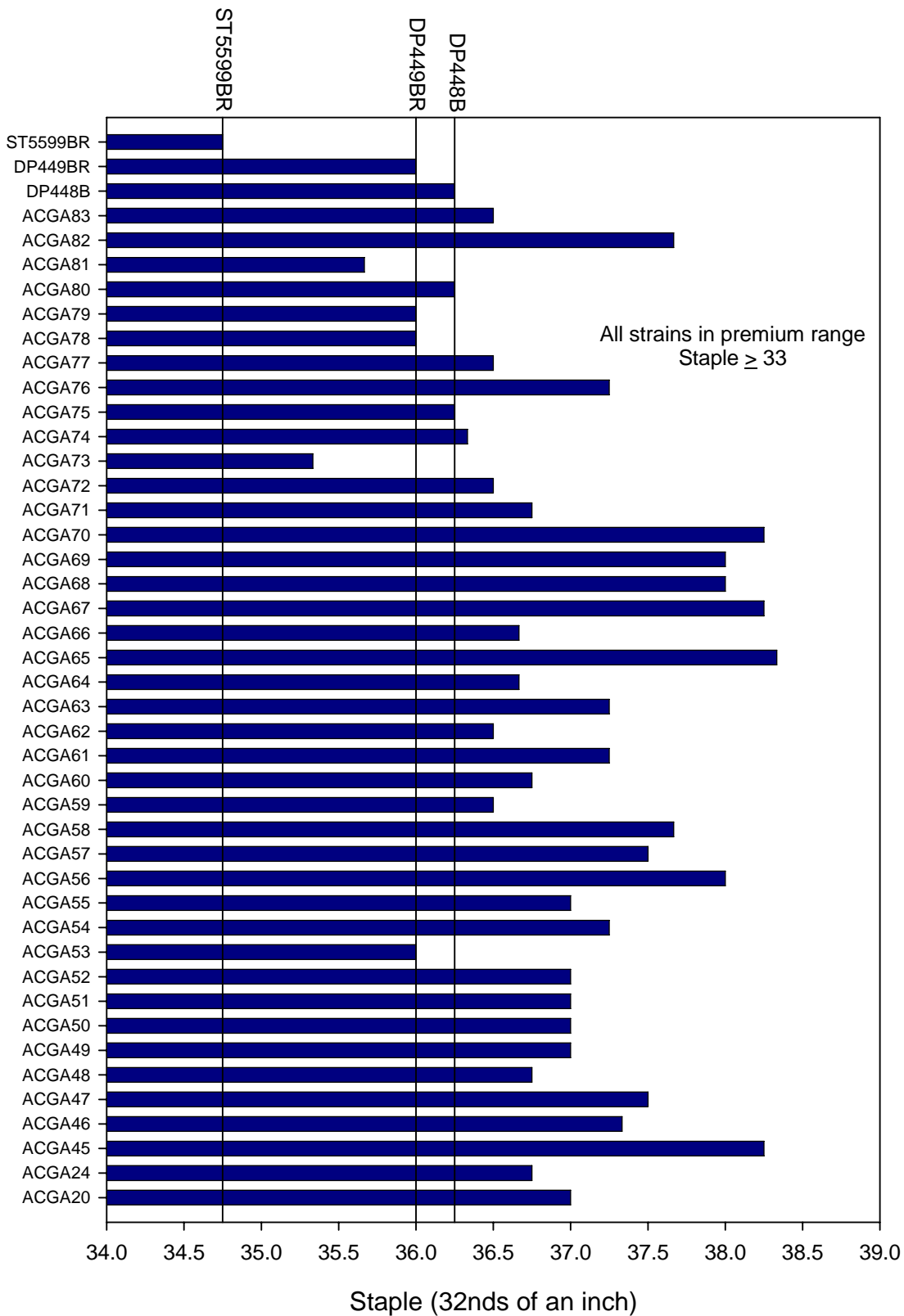


Figure 21. Fiber staple (32nds) values for each ACGA strain. All entered strains fell in the premium range for fiber staple. Vertical lines indicate staple levels for each commercial variety control. Data from Maricopa, AZ, 2005.

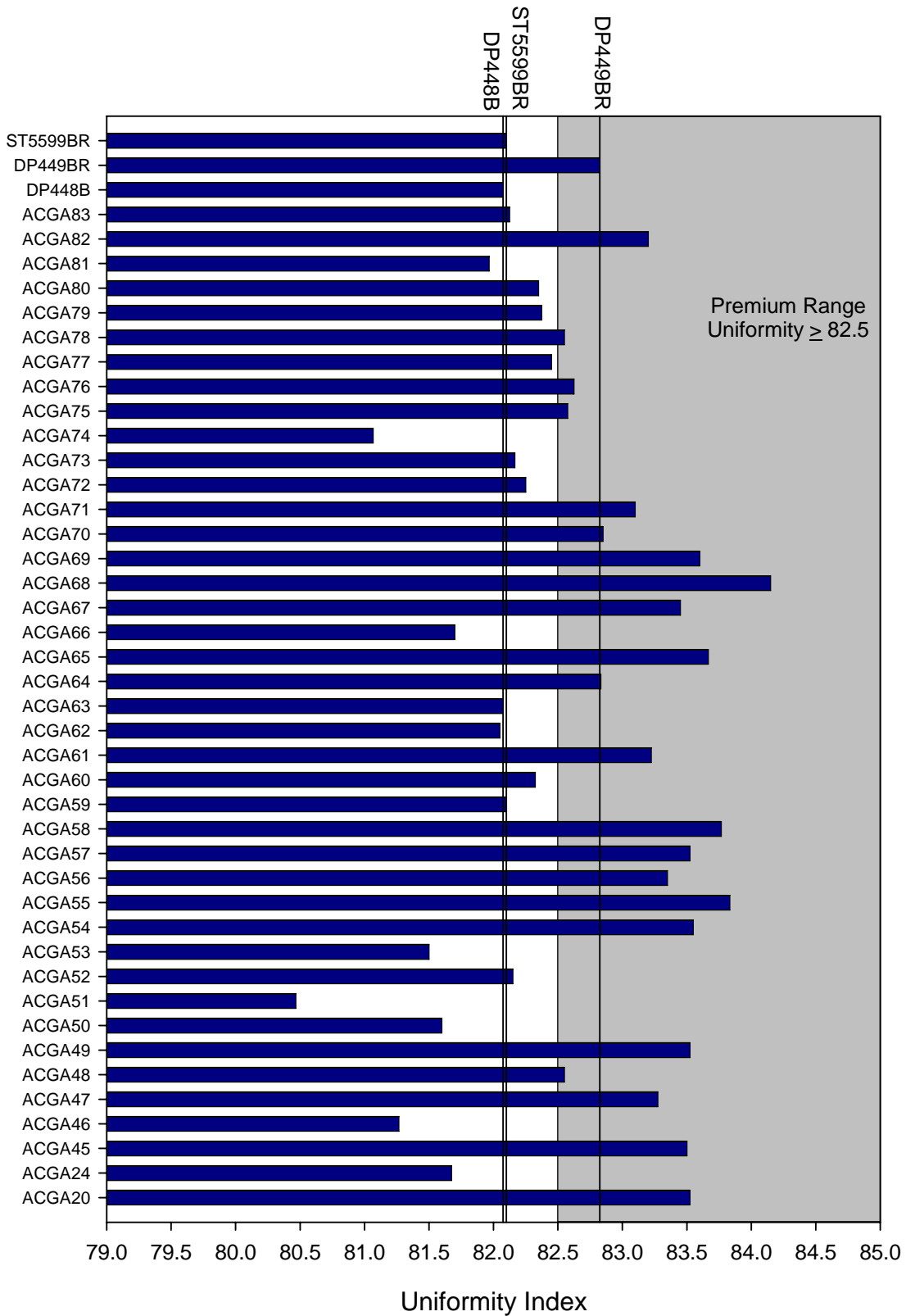


Figure 22. Fiber uniformity index values for each ACGA strain. Premium range for fiber uniformity is indicated by grey box. Vertical lines indicate uniformity levels for each commercial variety control. Data from Maricopa, AZ, 2005.

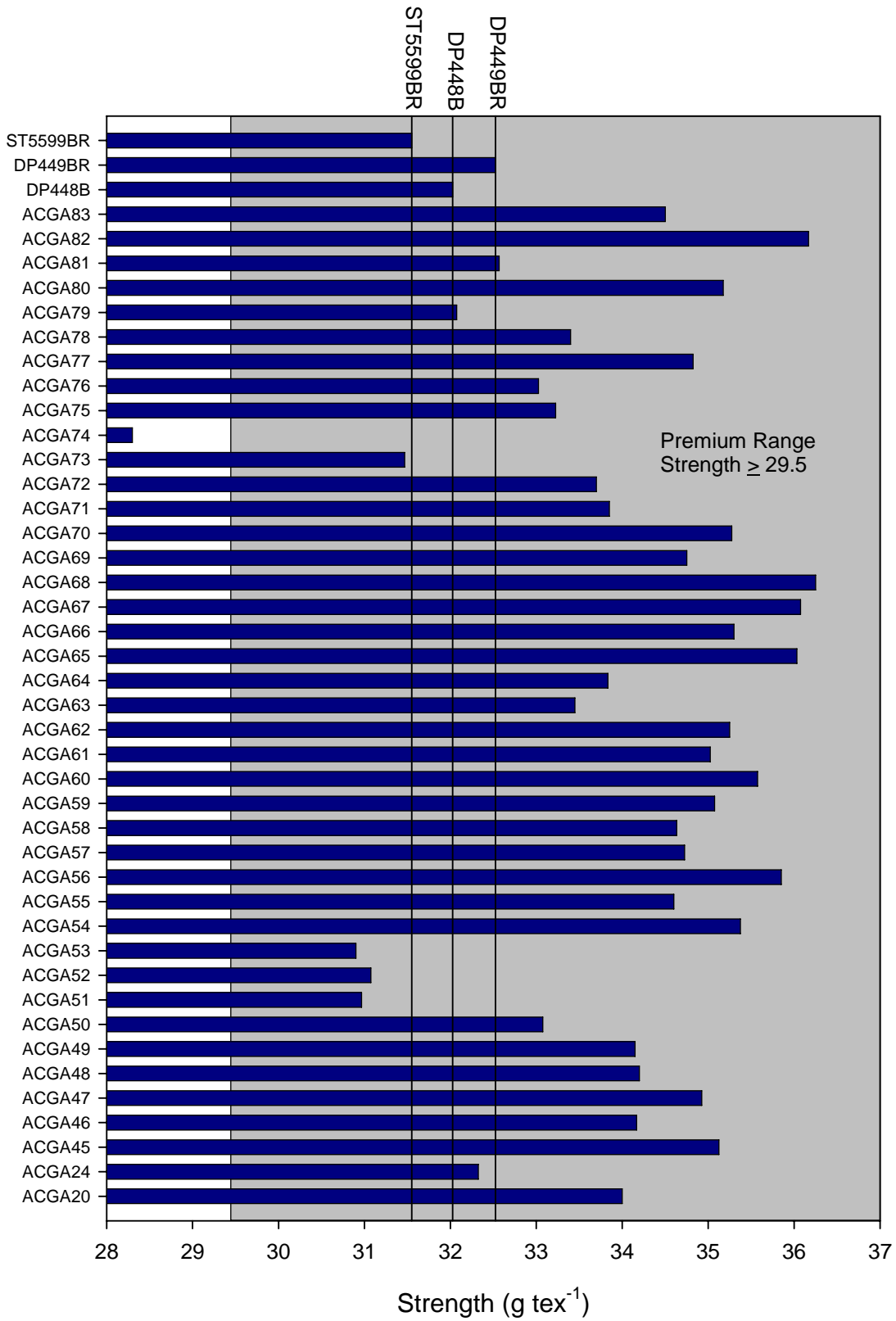


Figure 23. Fiber strength (g tex^{-1}) values for each ACGA strain. Premium range for fiber strength is indicated by grey box. Vertical lines indicate strength levels for each commercial variety control. Data from Maricopa, AZ, 2005.

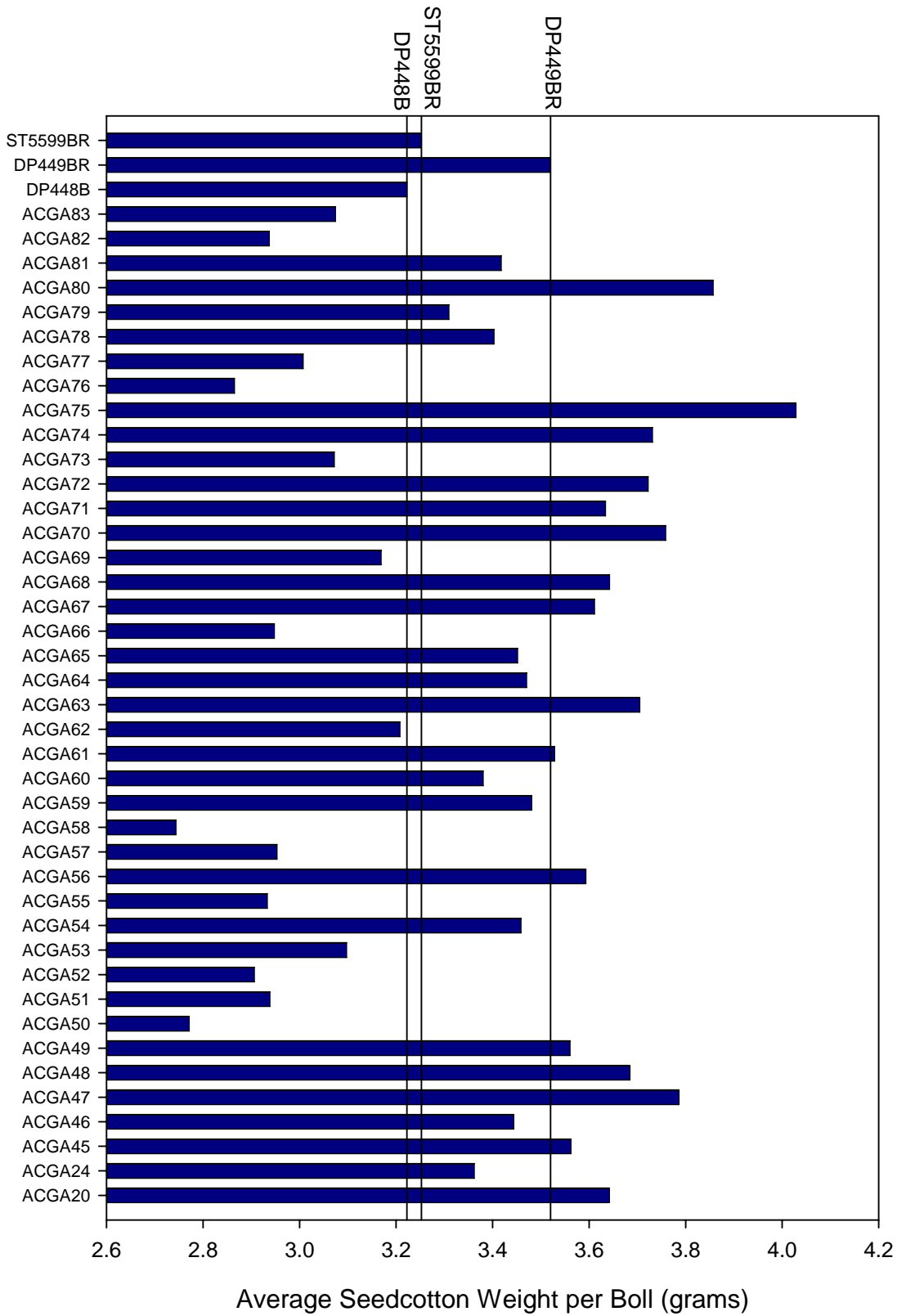


Figure 24. Average seedcotton weight (grams) per boll for each ACGA strain. Vertical lines indicate weight levels for each commercial variety control. Data from Maricopa, AZ, 2005.

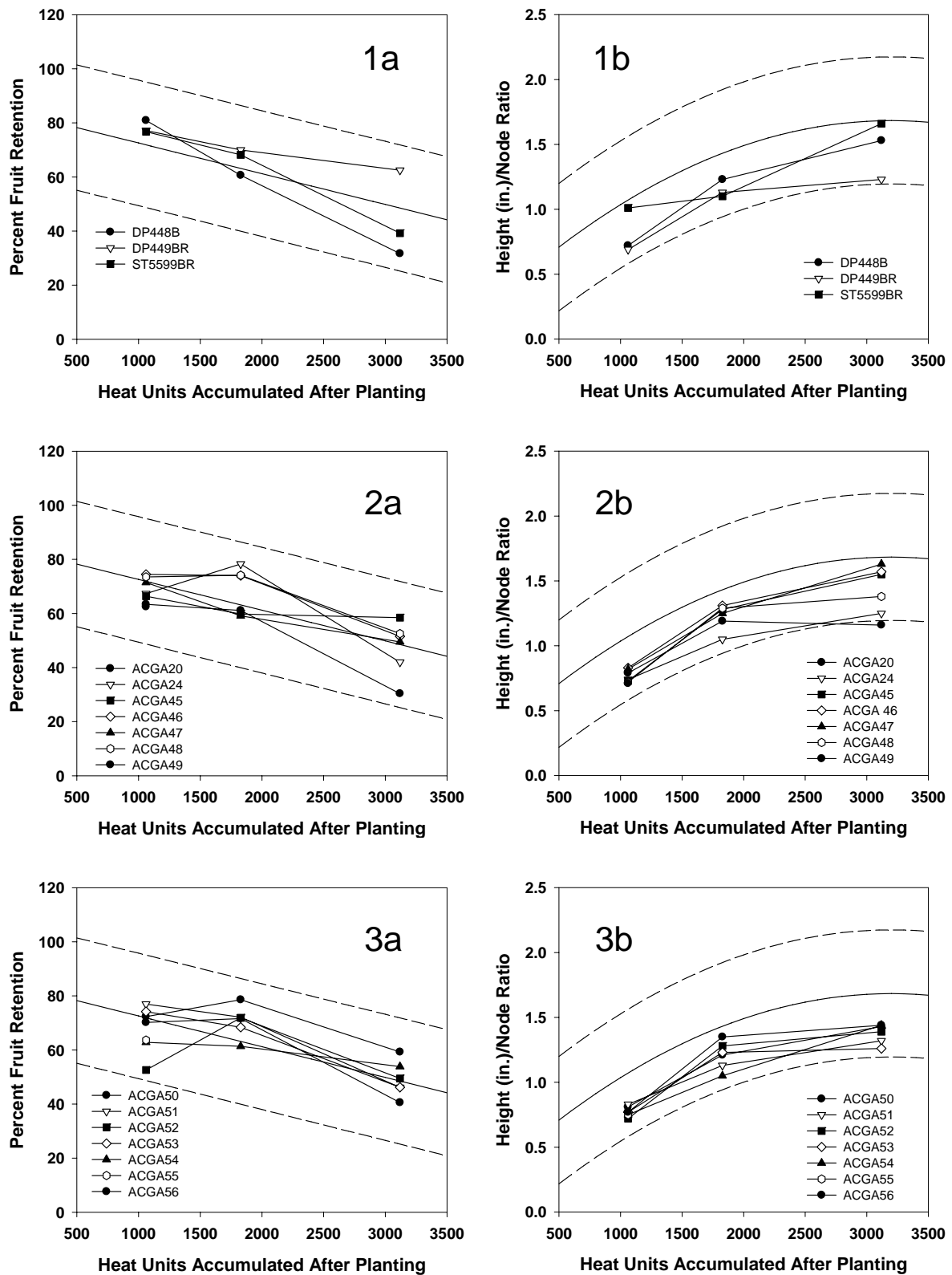


Figure 25. Percent fruit retention (a) and height to node ratio (b) levels for the control varieties (1) and ACGA (2 and 3) advanced strains planted at Yuma, AZ, 2005. The data are plotted as a function of heat units accumulated after planting. Solid and dotted lines represent baseline and upper/lower confidence intervals respectively for the two parameters.

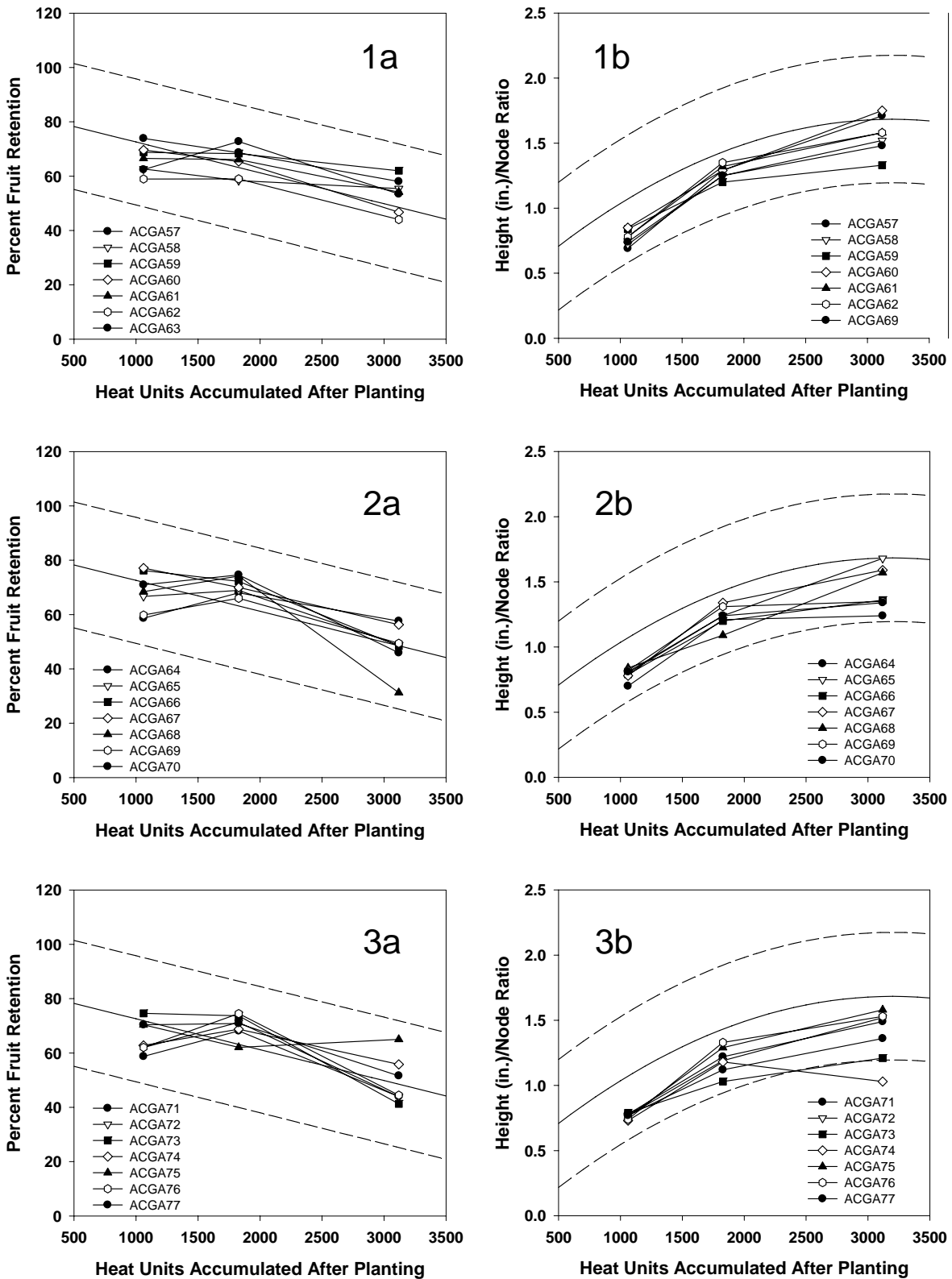


Figure 26. Percent fruit retention (a) and height to node ratio (b) levels for the control varieties (1) and ACGA (2 and 3) advanced strains planted at Yuma, AZ, 2005. The data are plotted as a function of heat units accumulated after planting. Solid and dotted lines represent baseline and upper/lower confidence intervals respectively for the two parameters.

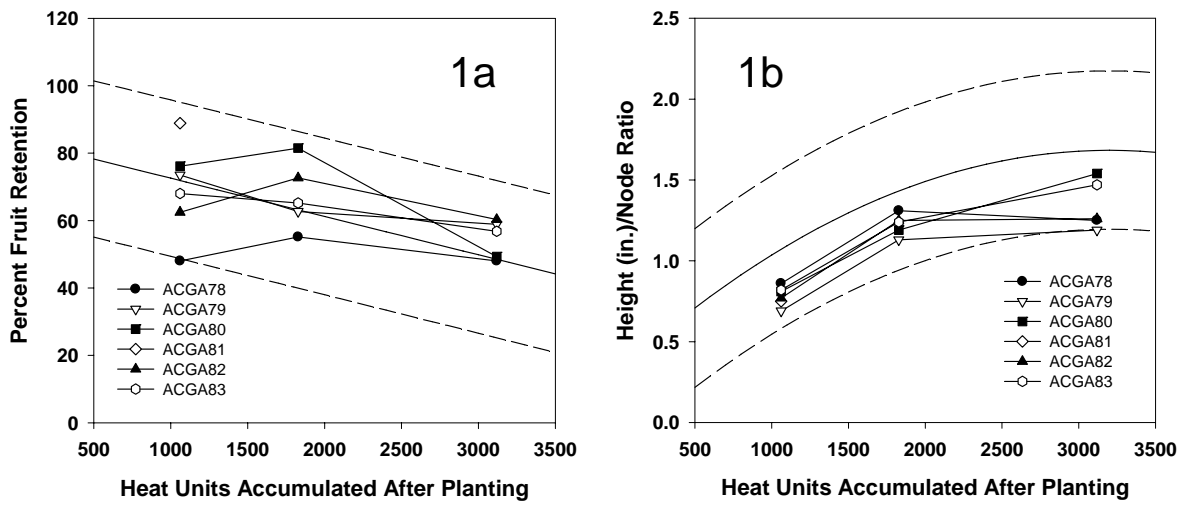


Figure 27. Percent fruit retention (a) and height to node ratio (b) levels for the control varieties (1) and ACGA (2 and 3) advanced strains planted at Yuma, AZ, 2005. The data are plotted as a function of heat units accumulated after planting. Solid and dotted lines represent baseline and upper/lower confidence intervals respectively for the two parameters.

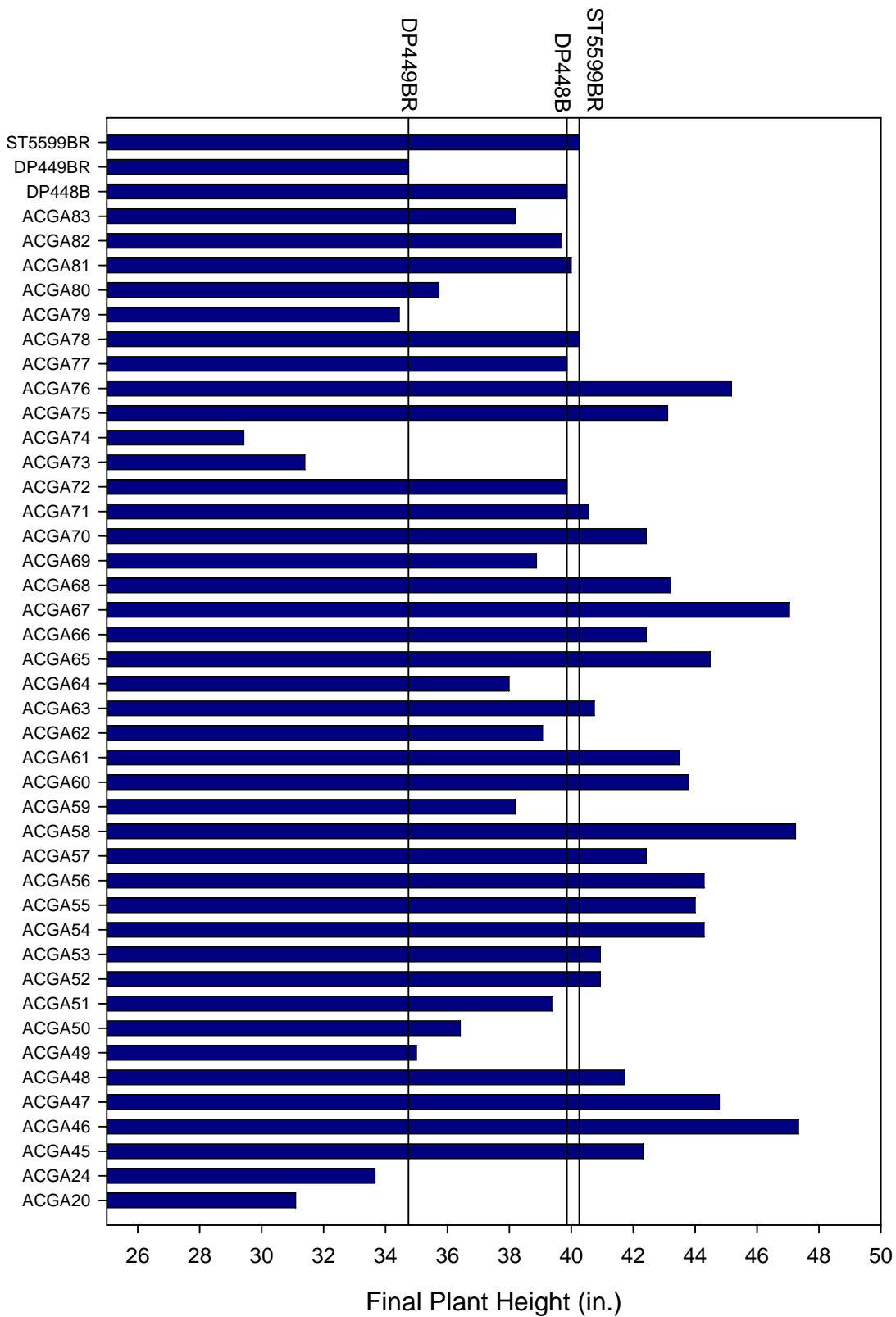


Figure 28. Average final plant height for each ACGA strain. Vertical lines indicate height levels for each commercial variety control. Data from Maricopa, AZ, 2005.

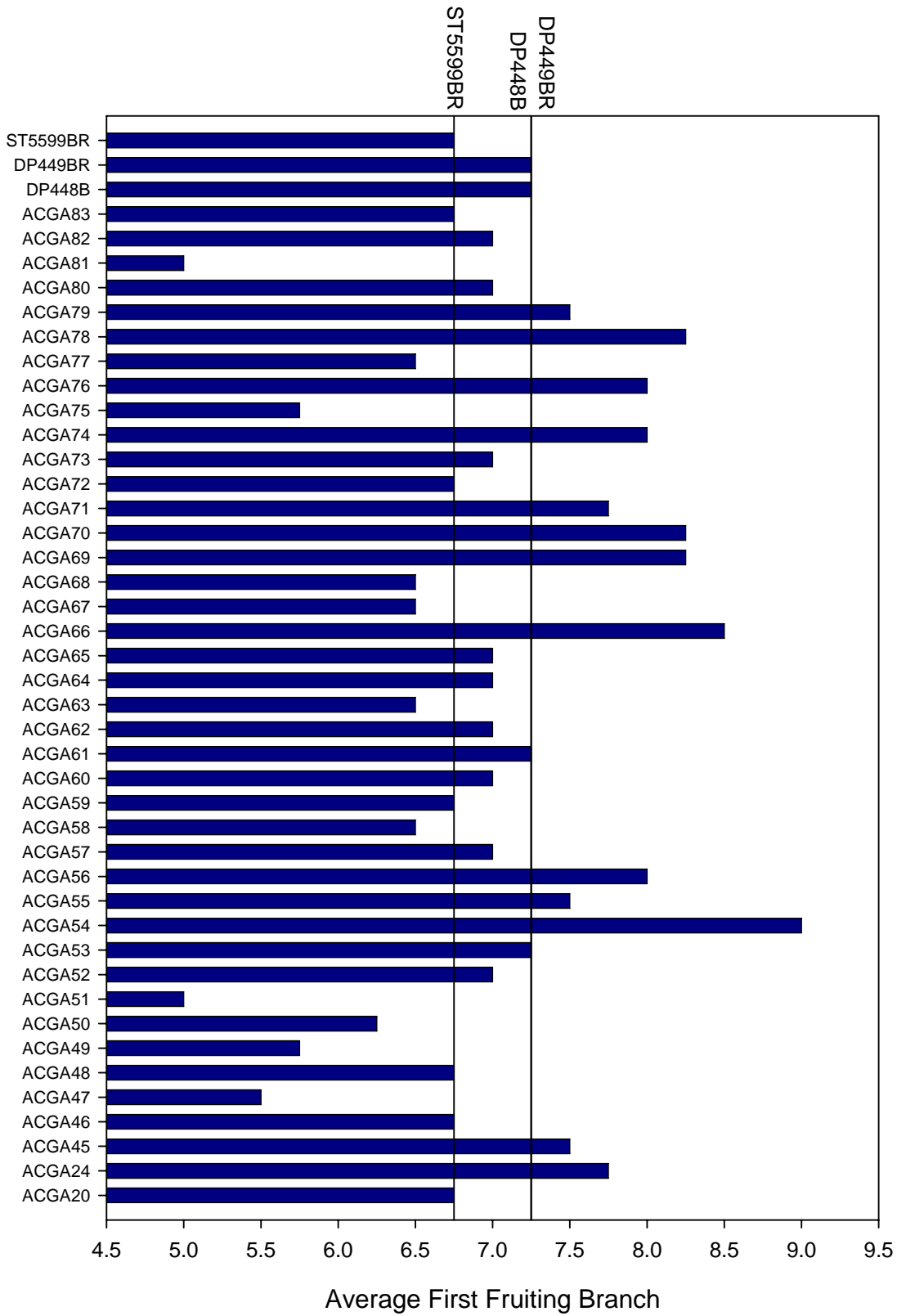


Figure 29. Average first fruiting branch for each ACGA strain. Vertical lines indicate first fruiting branch levels for each commercial variety control. Data from Maricopa, AZ, 2005.

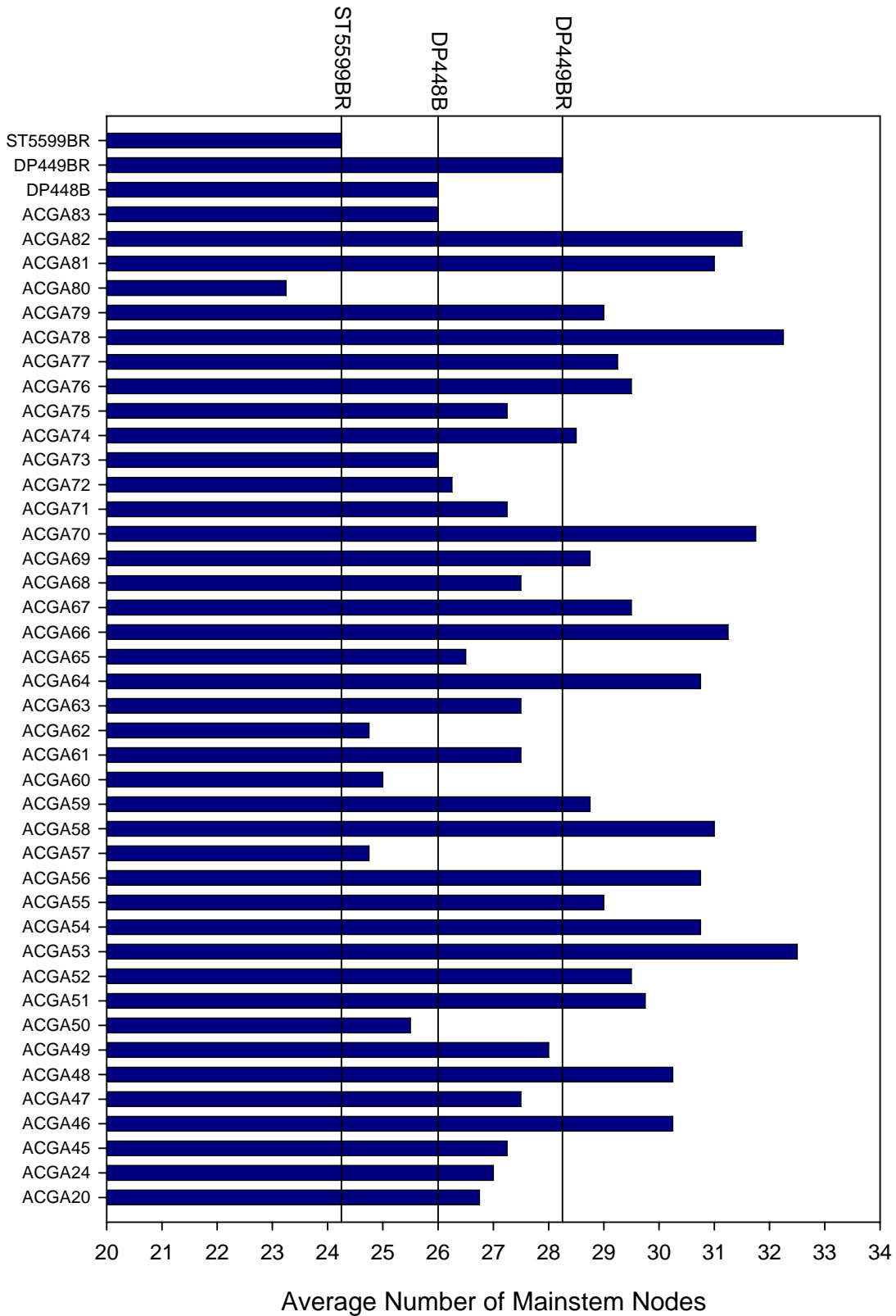


Figure 30. Average total number of mainstem nodes for each ACGA strain. Vertical lines indicate mainstem node numbers for each commercial variety control. Data from Maricopa, AZ, 2005.