



PEANUT VARIETY TESTING IN COOK COUNTY, GA.

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SITUATION

Released in 2006, Georgia-06G has been the predominant peanut variety planted in Georgia. Producers are interested in newer, alternative varieties for various reasons; "06G has played out"; "06G has low stand counts", "06G seems more disease prone". Peanut varieties in 2025 offer multiple levels of disease resistance as well as possible nematode resistance in addition to other important traits.

Peanut producers have increased interest in unbiased, research based data generated locally. UGA Extension Agent in Cook County received multiple requests for information regarding newer peanut varieties and their performances, particularly compared to GA-06G.



RESPONSE

UGA Extension in Cook County collaborated with local producers and UGA Peanut Team to establish two peanut variety trials in Cook County commercial peanut fields. Varieties compared in both trials were *GA-06G*, *Arnie*, *FloRun 52N*, *GA-18RU*, *TifNV-HG* and *DG-913*. **The objective of the trial was to generate and disseminate unbiased, research based data regarding available peanut varieties from which producers could use to base their peanut variety selections.** The trial was to include GA-06G in order to give producers a comparison to their standard variety commonly planted in irrigated (IRR) and non irrigated (Non-IRR) environments.

Methods & Materials:

Non-IRR: Planted - 6 May (A); Conventional till; 5 LBS Thimet + 3 oz Velm; Twin row; 36" spacing; 500' row distance; 6 rows/variety; 3 replications; Randomized complete block design; Stand counts - 16 May. Inverted - 23 September; Harvested - 2 October. Rep 1 sampled to grade.

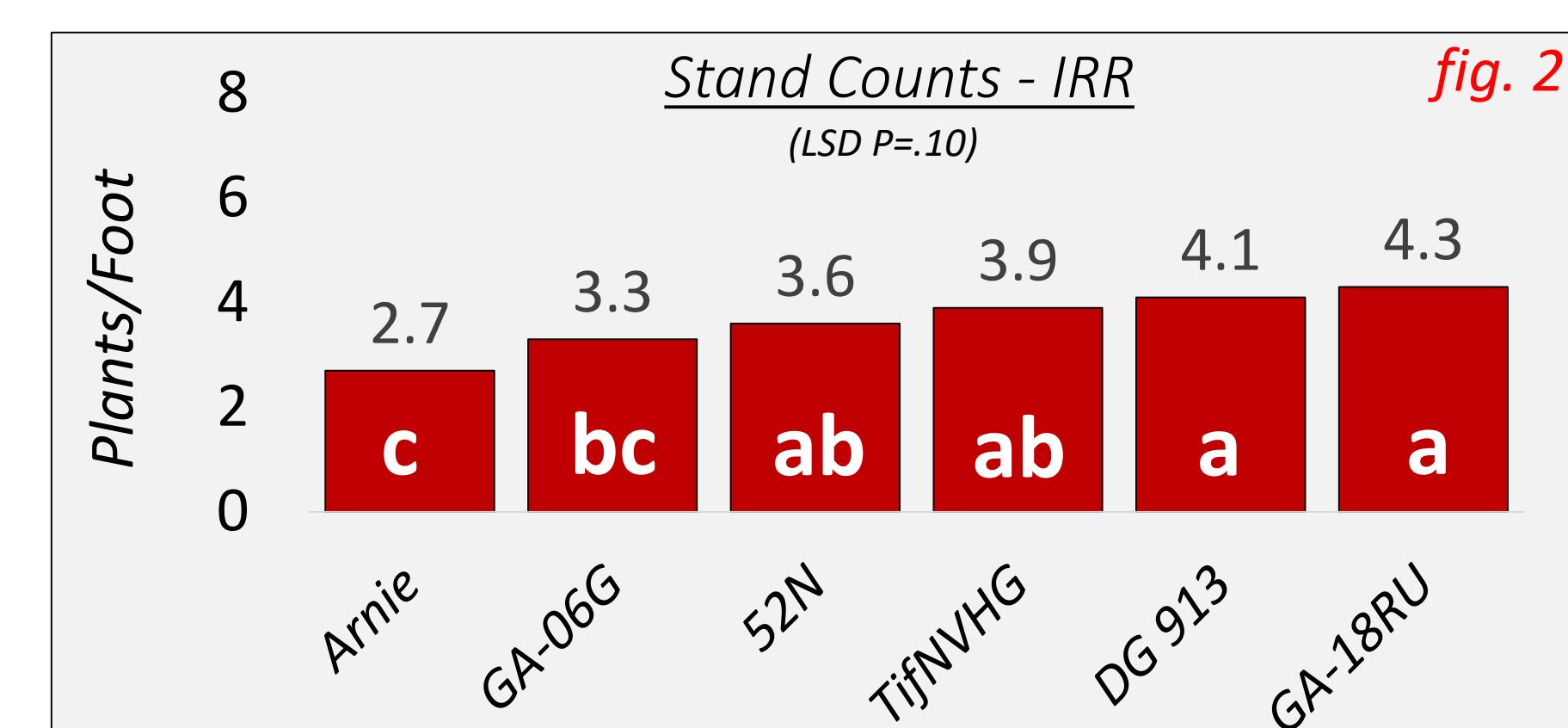
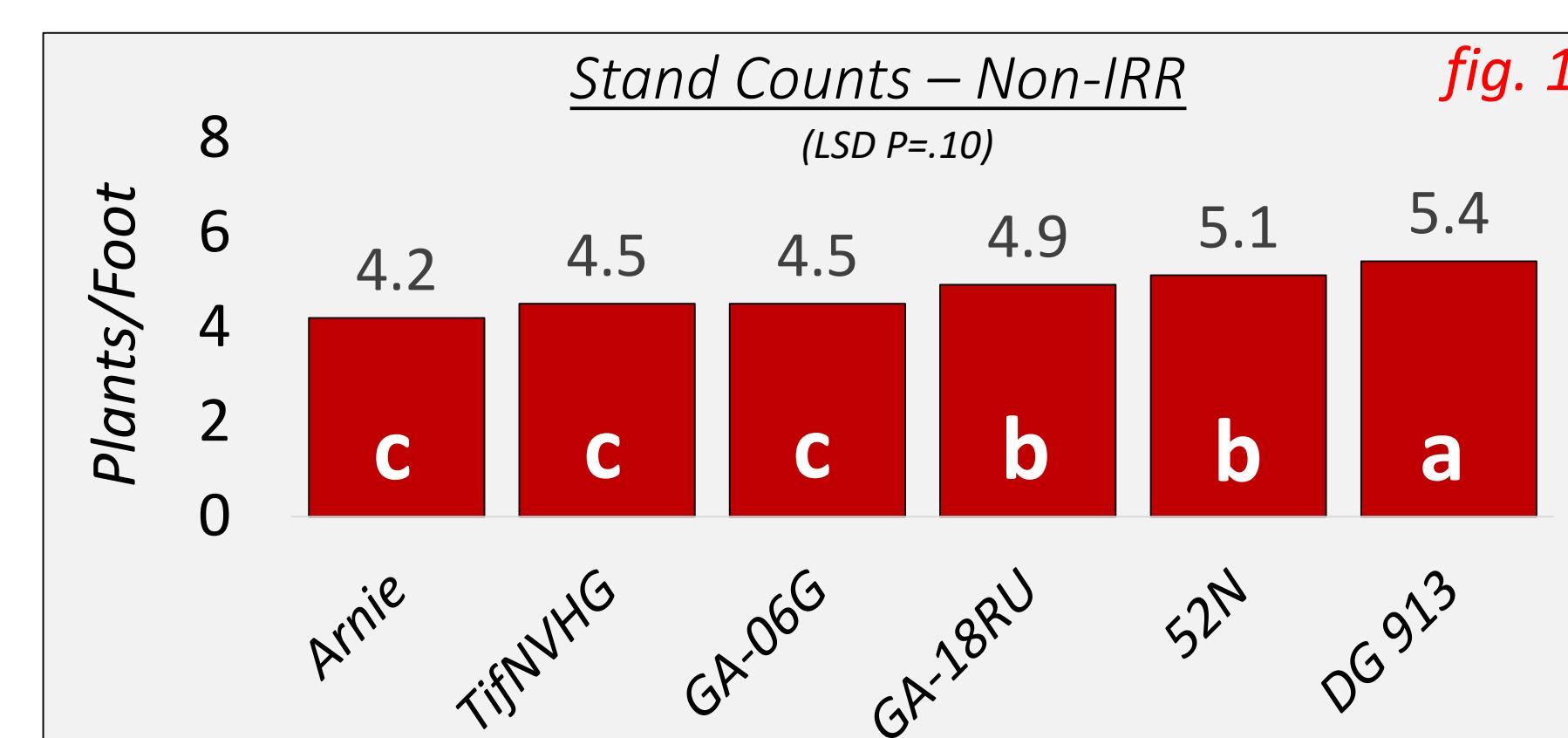
IRR: Planted - 7 May; Reduced till (B); 5 LBS Thimet; Single row; 38" spacing; 500' Row distance; 4 rows/variety; 3 replications; Randomized complete block design; Stand counts - 19 May (C); Leaf spot rating - 30 September (D); TSWV rating - 7 October. Inverted - 9 October; Harvested - 16 October (E). Rep 2 sampled to grade (F).



Methods & Materials

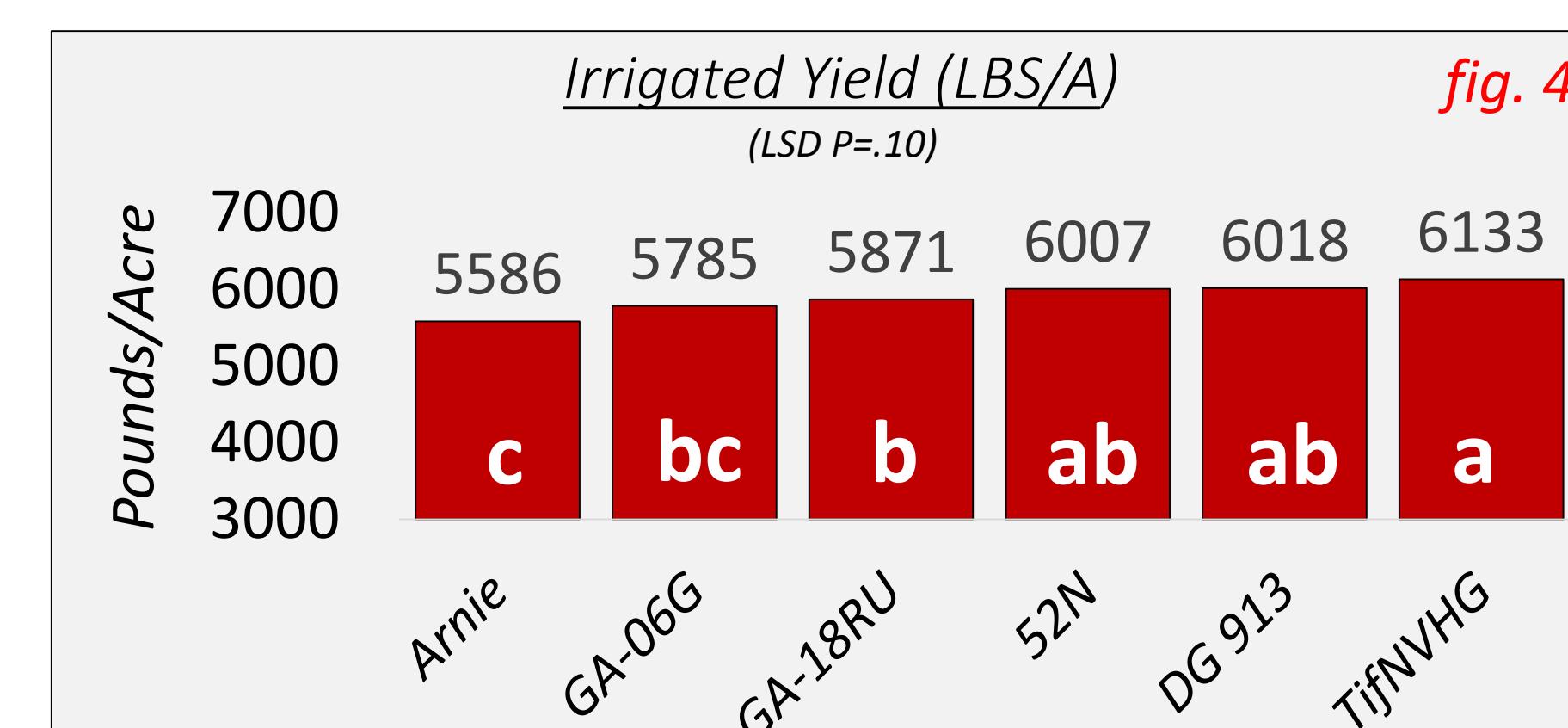
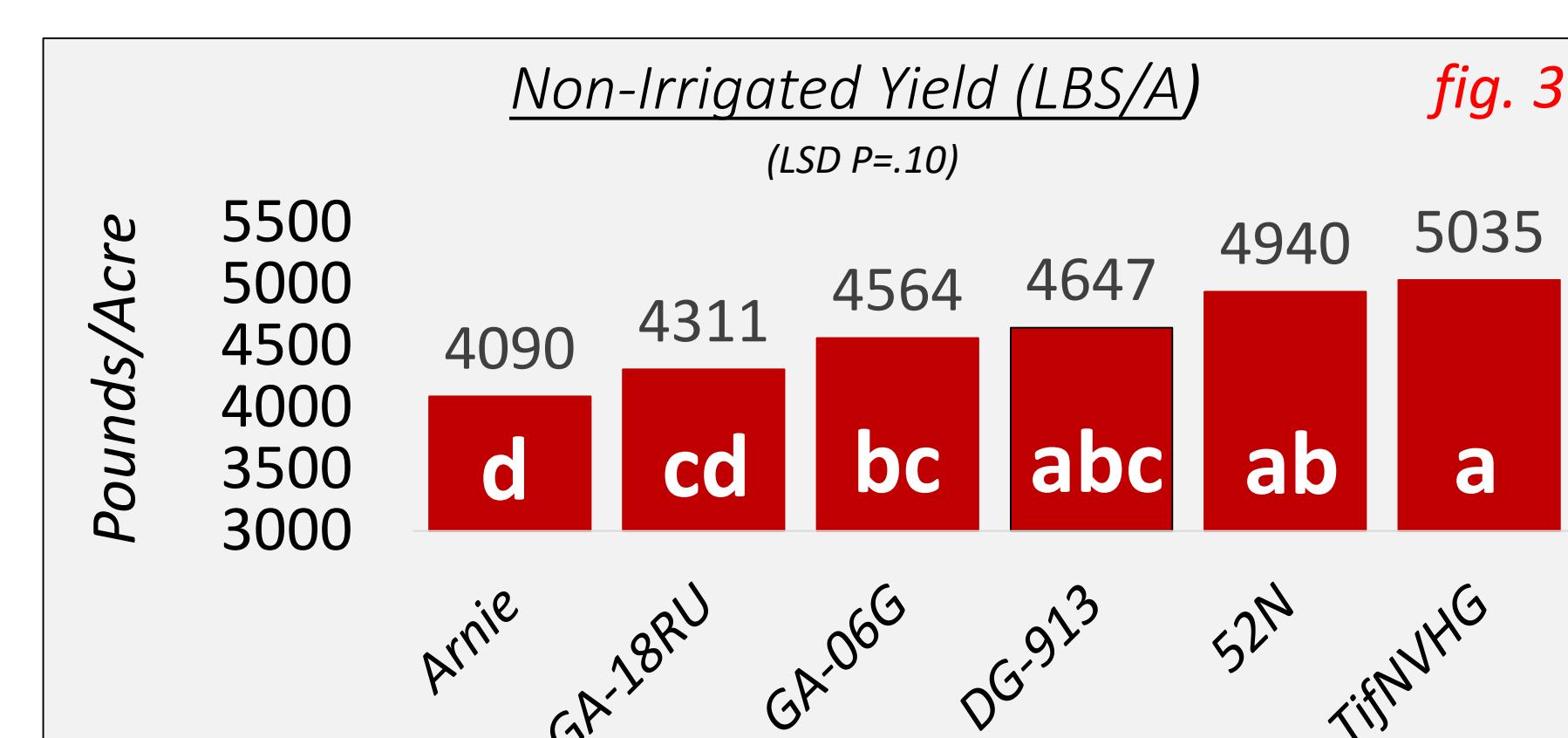
RESULTS

DG 913 showed greatest significantly highest stand counts in Non-IRR location (fig. 1) while IRR location (fig. 2) showed DG 913 as statistically equal to GA-18RU which had greatest significantly higher stand counts than Arnie. GA-06G had significantly lower stand counts in both Non-IRR and IRR locations compared to DG 912 and GA-18RU in both locations. (LSD P=.10)



Disease ratings collected at IRR location only. Tomato Spotted Wilt Virus (TSWV) recorded as number of one foot hits, per 100 foot of row. Leaf spot rated using Florida Scale (0 = no leaf spot; 10 completely defoliated). Leaf spot incidence (≤ 3.8) and TSWV ($\leq 2\%$) were insignificant in the trial and had no effect on yield.

Each variety yield was recorded and averaged among replications in Non-IRR (fig. 3) and IRR (fig. 4) locations. In both locations, data shows TifNV-HG yield significantly higher compared to Arnie, GA-18RU and GA-06G. There was no significant difference in yield among 52N and 913 in the IRR location. When comparing GA-06G among other varieties in the trial, 06G yielded significantly less than the top yielding variety (TifNV-HG) in both locations. (LSD P=.10)



Grades in Non-IRR (fig. 5) and IRR (fig. 6) locations were determined at Georgia Department of Agriculture's District Office in Tifton, GA.. Grades reflect percent, Sound Mature Kernel (SMK), Foreign Material (FM), Total Damage (TD), Moisture, and Segregation (Seg.) determination.

Non-IRR Grade Sheet

| Variety | SMK | FM | TD | Moisture | Seg. |
|------------|-----|----|----|----------|------|
| GA-06G | 69 | 0 | 4 | 6.1 | 2 |
| TifNV-HG | 72 | 0 | 2 | 6.3 | 1 |
| DG 913 | 72 | 1 | 3 | 6 | 1 |
| Arnie | 68 | 0 | 5 | 6.1 | 2 |
| FloRun 52N | 74 | 1 | 1 | 6 | 1 |
| GA-18RU | 73 | 1 | 2 | 6 | 1 |

IRR Grade Sheet

| Variety | SMK | FM | TD | Moisture | Seg. |
|------------|-----|----|----|----------|------|
| GA-06G | 70 | 4 | 1 | 6.5 | 1 |
| TifNV-HG | 70 | 1 | 2 | 6.8 | 1 |
| DG 913 | 72 | 1 | 3 | 6.3 | 1 |
| Arnie | 74 | 1 | 2 | 6.4 | 1 |
| FloRun 52N | 76 | 1 | 1 | 6.5 | 1 |
| GA-18RU | 71 | 3 | 2 | 6.3 | 1 |

DISCUSSION

In conclusion, peanut variety selection should be based on multiple year, unbiased, research based data. Other than GA-06G (released 2006), varieties tested in this trial have been released only within the last few years (exception GA-18RU, released 2018). Environment, soil conditions and days to maturity will vary among varieties; each bring their own traits that may or may not suit individual peanut producers. For this reason growers who are looking for alternatives should consider GA-06G's history as a proven and consistent performer since 2006. This data will be distributed to peanut growers and industry via UGA County Delivery System using social media, texts, blogs, one-on-one consultation, and oral presentations at county production meetings.

Acknowledgements:

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