



2006 Burr Medic and Legume Variety Trial
Gonzales County Extension Service
Dwight Sexton, CEA-Ag

Cooperator: The Luling Foundation Farm

Location: Luling, Texas

Situation:

The year around availability of high quality forage is a constant challenge for beef cattle producers. Most winter pastures consist of small grains, such as oats, ryegrass, or wheat, and are annual plants that need to be re-seeded every year. Winter pastures are grown extensively in Gonzales County to provide supplemental feed to stocker cattle, heifers, and mature cows.

Legumes provide an attractive alternative to these winter forages as they provide high quality forage that may re-seed itself annually. Additionally, legumes fix nitrogen in the air and make it available for other plants to utilize. Concerns for establishing legumes are they are expensive to establish, and they can be easily killed by a freeze or with certain broadleaf herbicides available on the market to producers.

- Objectives:**
- 1) To demonstrate proper management practices.
 - 2) To compare establishment, yields, and other characteristics of several medic, clover, and legume varieties.

Method:

- Cooperator:** Luling Foundation Farm
- Tillage:** The seed bed was disced twice and a firm seed bed was established. The seed was planted with a Brillion seeder, and then a roller-packer followed to improve the seed-soil contact.
- Planting Date:** October 25, 2005
- Fertilizer:** 100 lbs of 18-46-0 (18-46-0) was applied on October 31, 2005.
- Seeding Rates:** 8-80 lbs/acre, as per supplier's request.
- Inoculation:** All medic and clover varieties were inoculated immediately prior to planting with a rhizobium inoculate provided by the seed supplier unless the seed was pre-inoculated by the supplier.
- Plot size:** Plot sizes were 10 feet wide, and had a length of 50 feet, with three

replications randomly located in the field. The plots were harvested on two occasions with a sub-sample size collected of 1 square foot. Following the harvest of each sub-sample, the plots were shredded in an effort to simulate grazing and reduce lodging.

Harvest: The plots were harvested twice, on February 13, and April 13, 2006. These results are listed in Table 1.

2. Multiple Year Averages: An average of previous year's harvests are compiled in Table

Results:

Table 1. 2006 Luling Foundation Legume Variety Trial

| Variety | Cutting | | Total | |
|--------------------------|---------|---------|-------------|------------|
| | 2-13-06 | 4-21-06 | | |
| Legumes | | | | |
| Podamy Vetch | 2759 | 3049 | 5808 | <i>a-i</i> |
| Blanch Fleur White Vetch | 2323 | 2759 | 5083 | <i>a-i</i> |
| BioMaster Peas | 3049 | 1742 | 4791 | <i>a-i</i> |
| Barvicos Vetch | 2033 | 2468 | 4501 | <i>a-i</i> |
| Manna Berseem Clover | 1597 | 2904 | 4501 | <i>a-i</i> |
| Antas Sub Clover | 0 | 3775 | 3775 | <i>b-i</i> |
| Red Clover | 0 | 3340 | 3340 | <i>c-i</i> |
| Austrian Winter Peas | 1452 | 1888 | 3340 | <i>c-i</i> |
| Ceflew Arrowleaf Clover | 0 | 3194 | 3194 | <i>c-i</i> |
| Jester Medic | 0 | 3194 | 3194 | <i>c-i</i> |
| Jemalong Medic | 0 | 3194 | 3194 | <i>c-i</i> |
| Devine Little Burr Medic | 0 | 3049 | 3049 | <i>c-i</i> |
| Apache Arrowleaf Clover | 0 | 3049 | 3049 | <i>c-i</i> |
| Parabinga Medic | 0 | 2614 | 2614 | <i>c-i</i> |
| Bee Black Medic | 0 | 2468 | 2468 | <i>d-i</i> |
| Nitro Persian Clover | 0 | 2178 | 2178 | <i>e-i</i> |
| Patriot White Clover | 0 | 1888 | 1888 | <i>f-i</i> |
| Ball Clover | 0 | 1597 | 1597 | <i>ghi</i> |
| Maranoa Medic Mix | 0 | 1452 | 1452 | <i>ghi</i> |
| Armadillo Burr Medic | 0 | 1307 | 1307 | <i>hi</i> |
| Durana White Clover | 0 | 726 | 726 | <i>l</i> |

Mean totals followed by the same letter do not significantly differ (P=.05, Student-Newman-Kuels)

* Reported in pounds of dry matter per acre.

Table2. Luling Foundation Legume Variety Trials Multi-Year Summary.

| Variety | 2001Total | 2002Total | 2003Total | 2004Total | 2005 Total | 2006 Total | 3 Yr. or More Average |
|-----------------------------|-----------|-----------|-----------|-----------|------------|------------|--------------------------|
| Antas Sub Clover | | | | 14972 | 3775 | 3775 | 7507 |
| Devine Little Burr Medic | 10002 | | 4251 | 10400 | 5082 | 3049 | 6557 |
| Jester Barrel Medic | | | 5699 | 9074 | 6824 | 3194 | 6198 |
| Parabinga Barrell Medic | | | 4733 | 8705 | 7115 | 2614 | 5792 |
| Armadillo Burr Medic | 11093 | 878 | 5171 | 8240 | 5953 | 1307 | 5440 |
| Jemelong Burr Medic | 6759 | Froze | | 10430 | 4356 | 3194 | 4948 |
| Bee Black Medic | | | | 7092 | 5227 | 2468 | 4929 |
| Rio Grande Alfalfa | | | 4588 | 6108 | 3485 | | 4727 |
| Apache Arrowleaf Clover | | | 4939 | 6149 | 3049 | 3049 | 4297 |
| Ball Clover | | | 3722 | | | 1597 | |
| Bolta Balansa Clover | | | | | 2904 | | |
| Bigbee Berseem Clover | | 1260 | | 11802 | | | |
| Calipso Berseem Clover | | | | | 4646 | | |
| Ceflew Arrowleaf Clover | | | | | | 3194 | |
| Cherokee Red Clover | | 1182 | | | | | |
| Crimson Clover | | 489 | | | | | |
| Denmark Sub Clover | | | | 5526 | | | |
| Durana White Clover | | | | | | 726 | |
| Elite Berseem Clover | | | | 6141 | | | |
| Hubam Sweet Clover | | | | | 4211 | | |
| Kendland Red Clover | | 1140 | | | | | |
| Manna Berseem Clover | | | | | | 4501 | |
| Nitro Persian Clover | | | | | 5663 | 2178 | |
| Overton Rose Clover | | | | 6545 | | | |
| Patriot White Clover | | | | | | 1888 | |
| Red Clover | | | | | | 3340 | |
| Yellow Blossom Sweet Clover | | | | 7962 | | | |
| Yuchi Arrowleaf Clover | | 207 | | | | | |
| Haygrazer Alfalfa | | | | 6323 | | | |
| Highline Alfalfa | | | 4797 | | 3630 | | |
| Caliph Barrel Medic | | | | | 6244 | | |
| Herald Strand Medic | | | | | 6389 | | |
| Maranoa Medic Mix | | | | | | 1452 | |
| Mogul Barrel Medic | | | | | 5082 | | |
| Paraggio Barrel Medic | | | | | 5372 | | |
| Silver Snail Medic | | | | | 5517 | | |
| Barvicos Vetch | | | | | | 4501 | |
| Blanch Fleur White Vetch | | | | | 6679 | 5083 | |
| Hairy Vetch | | 965 | | | | | |
| Lana Vetch | | | | | 3049 | | |
| Podamy Vetch | | | | | | 5808 | |

* Reported in pounds of dry matter per acre.

Conclusions:

Following a very dry summer, the plot was planted following a 4 inch rain in the Luling area. The winter was extremely dry with minimal rain during the entire growing season.

Producers should note that the totals accumulated from this study represent results under the conditions that were present during this trial, and may not see the same results under their own growing conditions. Results over more years are needed to give producers a true indication of trends that can be expected with different varieties.

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