AGRONOMY STUDIES GONE ROGUE

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TODD AGRICULTURAL CONSULTING, LLC

INTRODUCTION

Agronomy is a agricultural subject studied by students from high school to collegiate levels. Raised in an urban environment, students like myself have taken hours of courses within the subject of agronomy and plant and soil sciences but have not had the opportunity to work amongst the farming community. Crop consulting is a career that requires problem solving within a farm setting of a variety of crops grown in a diverse farming community. It requires a vast amount of knowledge of plant pathology, entomology, plant physiology, weed science, mathematics and much more. Todd Ag Consulting, LLC is an independent crop consulting company owned by James Todd and his wife Lacey Todd in Plainview, Texas. Todd Ag Consulting provides services to west Texas growers within Hale, Lamb, Floyd, Swisher, and Castro counties. The thirty clients that Todd Ag Consulting provides services to range in size from 160 to 7,200 total acres. These acres are planted with a variety of crops from corn and cotton to cowpeas and sesame. The following represents the experience I, Loren Davis, gained as a Texas Tech Graduate Student while interning for Todd Ag Consulting.

GROWERS

Growers are as diverse as the fields they plant. Primarily the clients of crop consultants are farmers but can also include land owners, lending institutions, and chemical/seed companies. The clients of Todd Ag Consulting, LLC farms range in size from 160 total acres to 7,200 total acres. There are growers that simply just want the crop consultant to provide the facts about their fields. There are also farmers that depend more heavily on their crop consultant and expect them to be more of a manager of their farm.

Reasons for hiring crop consultants are vast. Reduction of production costs is a major part of crop consulting and is dependent on a successful growing season. Farmers and researchers both are always and will always be looking to increase production. As the U.S. and World population increases, it is necessary for production to increase. Todd Ag Consulting, LLC is an independent crop consulting company meaning there are no products for sale, incentives or quotas allowing the client's concern and goals to be the priority.

The larger growers depend on crop consultants to be their eyes in the field, and without the crop consultant they would not be able to manage the thousand of acres farmed as successfully. Smaller growers with only a couple hundred acres want the most bang for their buck, and crop consultants have the knowledge and experience to get the farmer to their maximum potential.

Image 1

Image 1: Technology helps crop consultants be as efficient as possible. Cell phones update growers and consultants on weather and current issues as well as allow consultant and client communicate quickly via email, phone, text message. Todd Ag Consulting uses an application on a tablet to scout fields so no had written field notes are necessary. Everything is documented and shared professionally.

AGRONOMICS

Image 2

Image 3

Image 4

Todd Ag Consulting clients grow several different types of crops including corn, cotton, sorghum, wheat, sunflowers, soybeans, cowpeas, and sesame. During the growing season, the consultant and field scouts visit each field weekly to ensure recommendations by the crop consultants to be made in a timely manor. When scouting a field consultants and scouts take measurements on crop, identify growth stage, monitor soil moisture, as well as practice IPM (Integrated Pest Management) to identify weeds, diseases, and insects pests in addition to detecting crop injuries.

Image 2 shows a cotton plant with herbicide injury from application of Banvel/ Dicamba. Image 3 shows a field of sorghum in the pollination growth stage. It is vital to check for sorghum midge during pollination. Sorghum midge is one of the most damaging insects to this crop. Female midge are most active when the crop is 25-75% pollinating and during the hours of 10 A.M. to about 2 P.M. when temperatures are below 90°F. The females lay their eggs in flowering spikelets causing sterilization. Image 4 shows the infamous weed Palmer Amaranth. Farmers and crop consultants state wide are starting to identify herbicide resistant generations of palmer amaranth within most of their fields.

PERSONAL EXPIERENCE

Skills developed from this internship are unlimited but include providing quality customer service, efficiency/time management, equipment handling, etc. Not only are these skills valuable to my education at Texas Tech University but also apply to life and will help me to be a better ambassador of agriculture.

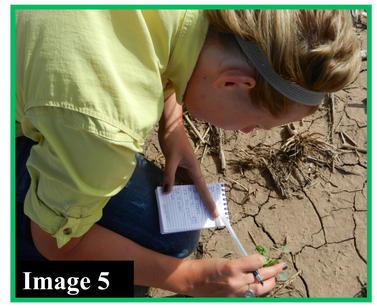

Image 5

Image 5: Germination is key to successful production. At the start of every growing season field scouts take stand counts within each field. Depending on how late in the season growers planted, stand counts tell whether the field needs to be replanted or an insurance agent needs to be contacted.

Image 6

Image 6: The use of a soil probe and the feel method are used to measure soil moisture within each field. Todd Ag Consulting installs soil moisture blocks at six inch, one foot, two foot, and three foot depths for an additional charge to the customer. At the end of the growing season fields are soil sampled for accurate fertilizer application using a hydraulic probe for efficiency.

CONCLUSION

As this internship comes to an end in December, I will have gained a vast amount of new knowledge that I would have never learned in a classroom. The respect that I now have for farmers and crop consultants world wide is abundant. The hard work, dedication, and knowledge required to be a successful crop consultant is unlimited. Although I will not be perusing a career in crop consulting or farming, this experience gave me the knowledge to support my career in teaching.

AKNOWLEDGMENTS

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