



December, 21 2006

Merry Christmas and Happy Holidays;

Enclosed you will find the results from our three regional research plots; Paxton, Imperial, and Clearwater. We wish to thank the following cooperators; Eldon Dyck, AK Acres, and Morrison Farms.

We were fortunate last August to have a beautiful day for our Field Day. We want to thank all of you who could attend, and look forward to seeing you next year. Seven people correctly picked the Mystery Hybrid (N1160); and one winner was picked. (Bruce Anderson) Bruce will receive 500 lbs. free seed.

The beginning of next year we will be sending you the results of our population research plot, dry land research plot, and our research plot in North Loup. This year we have expanded our research to include microwave testing. We will include this data also.

We have found that it has become more difficult to develop a hybrid that will be acceptable for all growing regions and farming practices. Therefore, our approach of having a small replicated research plot at several locations should be beneficial to all of us. We plan to add at least two new locations in '07.

The necessity of these regional research plots will become more and more evident as we encounter the subtle changes in our climate from global warming. It has been observed that a higher level of humidity and nocturnal temperatures have occurred in recent years. This has brought on the beginning of fungal and bacterial attacks that have not been observed until the last few years.

For example, the increase of Gray Leaf Spot infections, 6 to 7 years ago. This pathogen is still with us, but is less detrimental because we and the plants, have adapted to it. We are now presently experiencing an increase of fungi, which cause stalk rot in dent corn and popcorn.

If warming conditions continue, it may push the popcorn belt further north. In order to combat these climatic changes, we may have to adopt minor changes in our farming practices. Until at least plant breeding in general, produces hybrids that are adapted to these new climatic conditions.

With this previous information in mind, we should note that even with a global warming trend, those of us who live in this northern popcorn belt may have one or two seasons that will revert back to fewer growing degree days and the temperate climate of the past.

Taking this information into account, we have endeavored to develop short season, high performance hybrids that are resistant to the increase of disease pressure. Unfortunately we have not always been successful in this quest.

You will see in the following research plot reports that several hybrids appear to have overcome the latest plant diseases and still maintain quality and yield. The plots were not treated with a fungicide.

Regardless of which hybrid you use this spring, we would like to share with you the following conclusions from the observations we made of various production practices. These observations were made from Indiana, through the northern Corn Belt, to eastern Colorado.

1. Plant between the first and tenth of May whenever possible; this will allow for better herbicide control.
2. Plant two inches deep.
3. Keep the population around 28,000 plants per acre; don't be afraid of even a 24,000 stand.
4. Keep the total nitrogen (soil and applied) to 150lbs per acre, sulfur at 20lbs in the sulfate form. Check for zinc deficiencies.
5. Apply the fungicide Headline at pollination time, watch for fungi (wheat rust, etc.) reports in June and July, If these reports indicate a high infestation, as the last two years were, then consider applying Headline again the first week in August.
6. Be cognizant that the last half of August is not a high water demand period for popcorn.
7. Always yield the right of way.
8. When reading the newspaper, read the comics first.

In conclusion, feel free to call or email and discuss any of the above recommendations. WE are as interested in YOUR successful popcorn enterprise as YOU are. If you are not successful, we have nothing.

Sincerely,

Chuck Zangger  
President

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