

**2017 Agronomy Career Development Event
Variety Selection Practicum
For Event Use Only**

Scenario:

On your farm you have narrowed corn seed variety selection to seven (7) choices.

Your choices must be based on your prioritized need of:

- 1) Relative Maturity (RM) of 90-110 days [2300-2650 GDUs (Growing Degree Units) for reasons of planting/harvest timing and yield potential.
- 2) Goss's Wilt protection which has been a problem for 3 of the last 5 years.
- 3) Your area has occasional winds of 50-70+ MPH during the growing season.
- 4) Rapid drydown so you'll be able to harvest since there is a quick onset of winter and heavy snowfall in some years.

After reviewing the "Assumptions" and table of variety information, please answer the questions (both multiple choice and true/false) using sheet provided.

Assumptions:

- 1) Soil fertility and pesticide applications will be made to maximize yield.
- 2) Weather in your area:
 - a. This year's weather is expected to be like last year's.
 - b. Rainfall average is 23 inches of which 21 inches is plant available water.
 - c. Wind in growing season is occasionally 50-70+ MPH.
 - d. GDUs (Growing Degree Units are 2300-2650.
- 3) Soils are medium to heavy in texture and usually wetter and cooler (40-45 degrees F.) at seeding.
- 4) Yield averages on your farm are 210-240 Bu./acre.
- 5) Seed prices of all your choices are \$100-\$105/acre.
- 6) Disease pressure-Goss's Wilt is your biggest disease concern. The other pressures are much more manageable.
- 7) You are a very good farmer and manager.

Table 1. Agronomic Characteristics and Yield for Corn Hybrids under Consideration for On-Farm Use.										
Variety number	Relative Maturity (RM)	GDUs to silk	GDUs to Black layer	Seeding Vigor	Root Strength	Stalk Strength	Dry Down	Drought Tolerance	Goss's Wilt	2016 Yields Answer Plot Trial-West Central
3899VT2/RIB	98	NA	2400	1	1	2	2	3	3	247.2 bu/A
4791AS3111	107	NA	2680	4	2	3	3	3	3	243.3 bu/A
NK1066	105	1405	2580	2	4	4	2	2	3	242.9 bu/A
NK0760	107	1375	2570	3	3	2	3	2	4	241.2 bu/A
MY06R36	105	NA	2645	3	4	3	3	3	5	239.1 bu/A
MY92D54	90	NA	2400	3	4	3	3	2	5	230.3 bu/A
NK9227	92	1240	2300	3	4	2	3	1	4	229.8 bu/A
The scale used for seedling vigor, root strength, stalk strength, dry down, drought tolerance, and Goss's wilt was 1 to 10 with 1 representing excellent seedling vigor, excellent root strength and stalk strength, rapid dry down, best drought tolerance, and the best resistance to Goss's Wilt										

2017 Agronomy CDE- Variety Selection Practicum Questions

Circle the Most Correct Answer

- Why might you choose NK9227 &/or MY92D54 to plant some of your acres even though they are low on the yield list?
 - Helps diversity of relative maturities seeded?
 - Due to whether you get seeded weeks later than normal?
 - Due to drought and abnormally high winds?
 - All of the above
- Are plot trial yields the best way to choose variety?
 - Yes! If the trials are near your farm.
 - Yields are important but the other factors need to be considered important as well.
 - No! Yields are unimportant relative to the market price of corn.
 - Yes! If it is a full moon when you plant and your socks are wet.
- Why could any of these seven (7) varieties be acceptable choices?
 - They are above average in most categories.
 - They have the same set of genetics and attributes.
 - They fit my farm and the farm I plan to buy from the lower Amazon region of Brazil.
 - They are all sold by my cousin who I like even though he doesn't know much about seed.
- T/F It should be a consideration of how many acres of corn you have to harvest relative to your harvesting capacity in choosing relative maturities (RM).
- T/F It would not be advisable to use more than one variety and different relative maturities (RM).
- T/F When making seed decisions, all of the following may come into consideration: rational, informed, emotional, less effort, financial, contingent (e.g. My seed seller is also one of my landlords and leases me his land for 1/5 less than my other leases.)
- T/F I can help break a disease cycle in corn by planting soybeans every other year or every third year.