

## **Frequently asked questions in field days.**

### **1. What is range of temperature sensitivity?**

Metabolic activities are affected at temp. > 100 F or 40 C and < 10 C.

### **2. We are selling 5 hybrids in spring only one 34N43 is short, all other plant, mature & harvest at same time.**

Hybrid offering is to provide farmer a choice as per his need. This is to spread planting risk. Each hybrid may respond differently in the same environmental conditions. Multiple offering is to avoid environmental risk. All hybrids of different maturity planted at same time will mature at same time as the heat accumulation for all hybrids is same. This will be little difference observed in maturity.

### **3. In every field day farmers ask we planted at same time three hybrid only one not pollinated, if its sensitivity is high then why we sold this.**

Each hybrid may respond differently under same conditions. This is due to GxE interaction which affects hybrid performance. Same hybrid planted at same location may not perform same every year. If you know the sensitivity then should not recommend planting sensitive hybrid in the same area again. Mind that each year may be different for hybrid performance,

### **4. Biggest threat to germination failure after seed dispatch from seed plant.**

Every seed dispatched from seed plant is tested for proper germination. Steps have been taken to avoid such mishaps in future.

### **5. Importance & dangerous to seed treatment by farmer/dealer.**

Seed is sensitive to chemicals. Improper seed treatment affects seed germination and seedling. Educate dealer and farmer to use recommended treatment.

### **6. What make the difference because of long & hot days?**

Continuous heat, drought or any stress affects plant growth. Long and hot period for more than 24 hours disturbs plant cycle, photosynthesis (food making process) which ultimately affects yield.

### **7. What make the difference because of long & hot nights?**

Plant goes through photorespiration which is loss of energy. Plant uses its energy to defend its system. There is no energy left to run the plant metabolism.

### **8. What are the other than heat factors dangerous for pollination?**

Very low (<20%) and very high (>80%) humidity, moisture stress, nutrient stress (specially N), long duration of rain, continuous wind storms can affect pollination, silk and pollen timing difference.

### **9. Critical stages for pollination.**

Even germination, sufficient nutrient and water supply at teaseling, temp. 30-38 C and humidity 30-50%

### **10. What are basic criteria for balance fertilizer?**

NPK 1:0.5:1 or depending on soil test

### **11. Criteria for best suitable land for corn planting.**

Well drained loose soils, soils where vegetables can be planted are generally good for corn

**12. Best stages/timing for irrigation.**

Soil surface should not remain dry for good corn yields, corn should be irrigated frequently during all stages of growth, no water stress from teaseling, pollination to physiological maturity (black layer),

**13. Best stages/timing for fertilizer application.**

Basal application, V6 and before teaseling. Total P and K before planting and N in 3 distributions before silking.

**14. Impact on yield because of weeds stage by stage.**

Depends on weed pressure. Generally weeds make 20% loss specially in the early 30 days when crop is young.

**15. What is the difference between heat & drought resistance, which is more important for Pakistan?**

When there is heat plant is affected by drought. Plant system does not work effectively in heat >38 C. It is difficult to separate both.

**16. Losses due early harvesting, can we calculate?**

Weight loss as the grain is not fully developed.

**17. Why we not suggest for planting in October & November.**

Frost damage may occur before V5 and slow or no growth in Dec. due to very low temp. Delay in planting will avoid plant from frost.

**18. Which are the critical most stages for frost & what is the impact of frost?**

Just after germination to V5. Leaves may die, become yellow, brown and no growth. Plant will recover before V5 when growing point is below soil.

**19. Best methods for corn grain storages, we can suggest to farmers?**

Shelled corn - Dry grain at below 13% moisture, unshelled cobs can be stored if dry at 20% moisture, keep in aerated place, avoid excessive moisture and humidity.

**20. Which pest is most dangerous for corn & which is not at which stage?**

Shoot fly, borer, shoot worm, army worm, mites can reduce yield

**21. What is the future of corn?**

Huge demand for corn grain in the world and Pakistan. There is 25% shortage of grain as per need of the feed industry. Corn grain is used for biodiesel, food and feed worldwide.