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Photo by Harlen Persinger

OPTIMUM YIELDS: Planting corn early is important to high yields. Keep in mind, corn yield decreases half a bushel per acre per day starting May 15 and accelerates to 2.5 bushels by June 1.

By **FRAN O'LEARY**

ACCORDING to Joe Lauer, University of Wisconsin Extension corn specialist, the three most important management decisions a producer can make are hybrid selection, hybrid selection and hybrid selection.

"Select hybrids using multi-location performance data, evaluate consistency, buy the traits you need, and remember, every hybrid must stand on its own," Lauer says. "Don't focus only on seed price."

Pay attention to yield, maturity, lodging resistance, pest resistance and specialty genes, he says.

Beyond hybrid selection, Lauer says there are nine more yield-impacting factors producers should not ignore.

Key Points

- Hybrid selection is a key factor in achieving top corn yields.
- Planting early and controlling weeds are critical.
- Tillage is unnecessary except in continuous corn.

■ **Weather:** Crops in Wisconsin are challenged by wet springs that result in lack of root surface area, and dry, hot conditions during pollination that reduce kernel set and grain filling.

"Producers should pray for a spring dry enough for early planting, but wet enough to activate herbicides and promote good stands with uniform emergence," Lauer says. Ideal summers would provide lots of sunshine, timely 1-inch-per-

week rains and temperatures in the mid-80s.

■ **Planting date:** The planting date sets up the season. If you plant late, you face a double whammy — low yields and higher moisture. Lauer suggests focusing on seedbed conditions and calendar date rather than soil temperature. The number of days from planting to emergence is key in establishing the amount of seedling disease.

■ **Weed control:** Early-season weed competition costs producers yield.

■ **Crop rotation:** "Rotating crops is the easiest yield you can get," Lauer says. "It's the gift that keeps on giving." Corn yields increase 10% to 19% when rotated with soybeans. The rotation effect is even more dramatic in stressful years, and

it lasts up to two years.

■ **Plant distribution:** Plant density has the most potential to change current yield levels.

"Plant densities for maximum yield are increasing as new hybrids are commercialized," Lauer says. Seeding depth should be 1½ to 2 inches. Narrower row spacing is better.

■ **Insect management:** "It's all about scouting and timing," Lauer says. Common pests include corn rootworm and European corn borer.

■ **Soil fertility:** "It's not the place to cut costs," he notes. Soil test and only apply needed nutrients:

✓ Use the cheapest form of fertilizer per unit of nitrogen, phosphorus or potassium, and apply efficiently.

✓ Use manure and legume

credits to reduce purchased fertilizer costs.

✓ Don't cut back on overall N supplied unless overapplying.

✓ Don't use micronutrients unless soil test recommends it.

■ **Disease management:** "What is good for the crop is good for the pest," Lauer notes. The goal of disease management is to improve the corn canopy, leading to yield increase and disease decrease. Genetic resistance is the cheapest control.

■ **Tillage:** Tillage is not necessary except in continuous corn. "It's all about stand establishment," Lauer says. Tillage does not affect corn yield the first year following soybeans, but in continuous corn, it boosts yield 5% in the second year and 9% in the third year.

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