

Supplementing Corn Nitrogen



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Supplemental nitrogen may be needed in corn fields that are short of nitrogen because applied fertilizer has been lost from wet soils. Fields most likely to lose N: poorly drained soils, hilly ground where N ends up in the swags, fields that stay saturated for 2 or more days at a time. There is no precise method to measure N loss. We can try to estimate loss looking at source, time since application, level of field saturation, etc. We can tissue test for sufficiency or try a PSNT behind **broadcast N or manure**. Or we can go with our gut and throw more on. Right now producers fall into two groups: those with all their nitrogen out who are wondering whether to add more back and those still lacking a layby application and who can still make adjustments.

• Layby applications can be increased by 30-50 units N/A to offset the at-planting N we believe to be lost to the crop.

• Producers who have applied all N planned

for the season may want to wait a week or two and watch corn for greening up. If weather improves and corn doesn't green up like it should consider a tissue test for N sufficiency and apply more N if needed. (Note: if you are in an area where high clearance equipment or aerial application is not an option, corn is still short enough to drive through, and gut feeling is you are going to be short on N, consider applying additional N with conventional equipment now, i.e. N as UAN behind a coulter).

• Best sources for late or 'rescue' treatments are urea with a stabilizer or ammonium nitrate applied by air. Any foliar N will burn corn leaves. Ammonium nitrate should be applied to DRY corn leaves to minimize burn damage.

• Those who fertigate can apply liquid N through the system as needed. A stabilizer is generally not necessary with a fertigation application as long as adequate water is applied to incorporate N. Aerially applied urea that can be irrigated in may also be applied without a stabilizer. Δ

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