Broadcast postemergence UAN solution

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Abstract
Broadcast application of urea-ammonium nitrate (UAN) solution to growing corn has the potential to cause phytotoxic symptoms of leaf burn, loss of leaves, and reduced early growth. Burn symptoms will be visible within 24 to 48 hours after application. Depending upon the severity of damage, reduced plant growth may be visible for several weeks after application. Research conducted in Minnesota indicated that when corn plants are at the V3 growth stage (vegetative leaf stage defined according to the uppermost leaf whose leaf collar is visible—in this case three leaf collars visible), phytotoxic effects were worse at nitrogen (N) rates above 60 lb N/acre (rates applied were 0, 60, 90, and 120 lb N/acre), but damage was not permanent and did not adversely affect stand or yield.

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Conservative suggestions are to not exceed 90 lb of N/acre when corn is at the V3 to V4 stage, 60 lb N/acre at the V7 stage, and to not apply UAN to foliage if plants are larger than the V7 stage. Hot, dry weather conditions will increase leaf burn and plant growth reduction.

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