Nitrogen watch for poorly- and somewhat poorly-drained soils

Accumulated Precipitation (in) May 1, 2021 to June 29, 2021



Midwestern Regional Climate Center cli-MATE: MRCC Application Tools Environment

Poorly-drained soils lose N mainly by denitrification, which is very temperaturesensitive. My rule of thumb is that wet conditions in May and June cause denitrification losses, but losses in April are minimal.

Areas shown in cross-hatch are 'problem areas' that have already received 12 or more inches of rainfall since May 1. I expect a majority of fields to have substantial yield loss due to N deficiency when all N was applied pre-plant. I suggest that producers look at their fields and when N stress is seen apply additional N. Rescue N applications are likely to be profitable until tasseling or later in fields with deficiency symptoms. Satellite images or canopy sensors potentially provide a way to improve distribution of this N application, putting more N where stress is greatest and little or none where corn looks good.