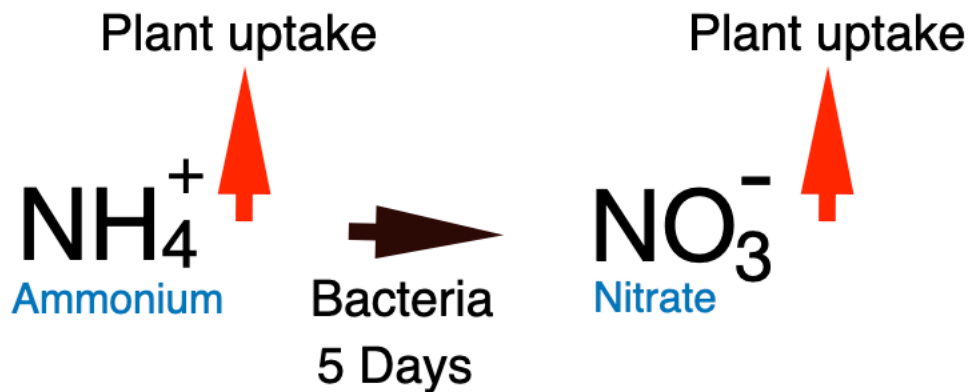




Monitoring Ammonium in Potatoes and Onions

In 2026, you've got to know your nitrogen. Potatoes and onions uptake both ammonium and nitrates. The majority form of nitrogen you're going to apply this year is in the ammonium form. Solution 28 and 32 is three-fourths ammonium. 10-34-0 ammonium phosphate is 10% ammonium. Thiosol is 12% ammonium.

On a warm summer day, it takes five days for bacteria to convert ammonium to nitrates. In this period, ammonium can be taken in by the roots and could be meeting the daily needs of your crop.

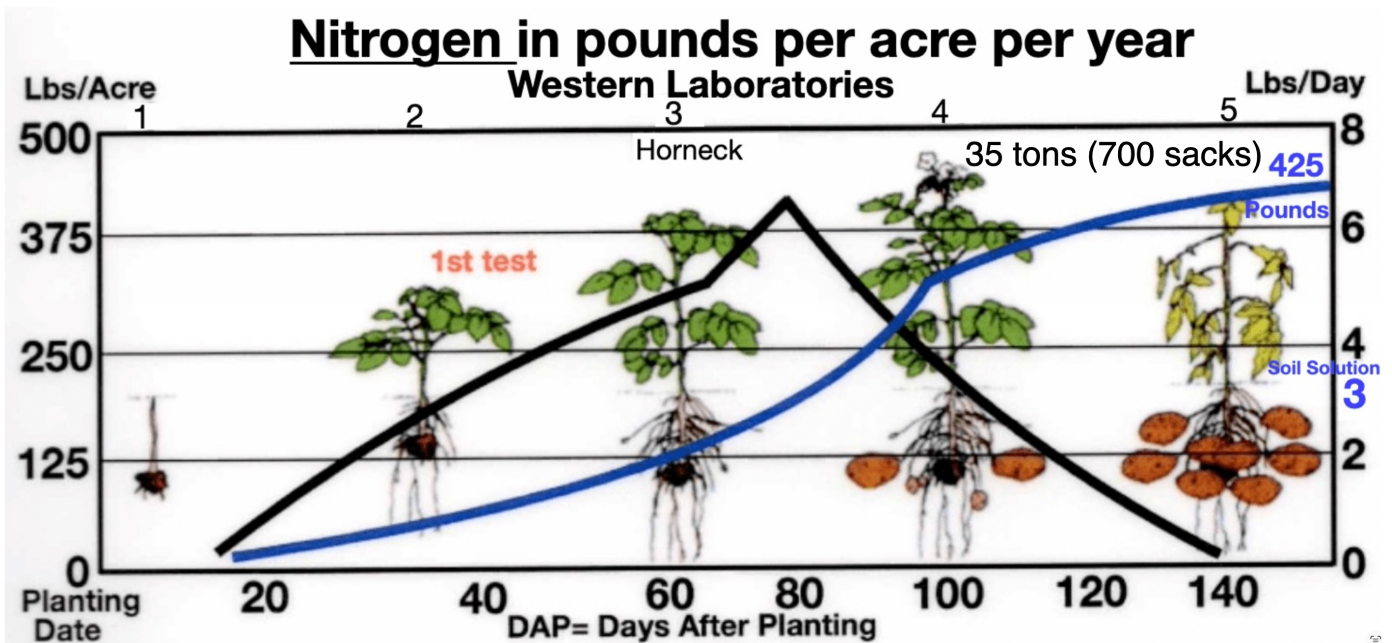


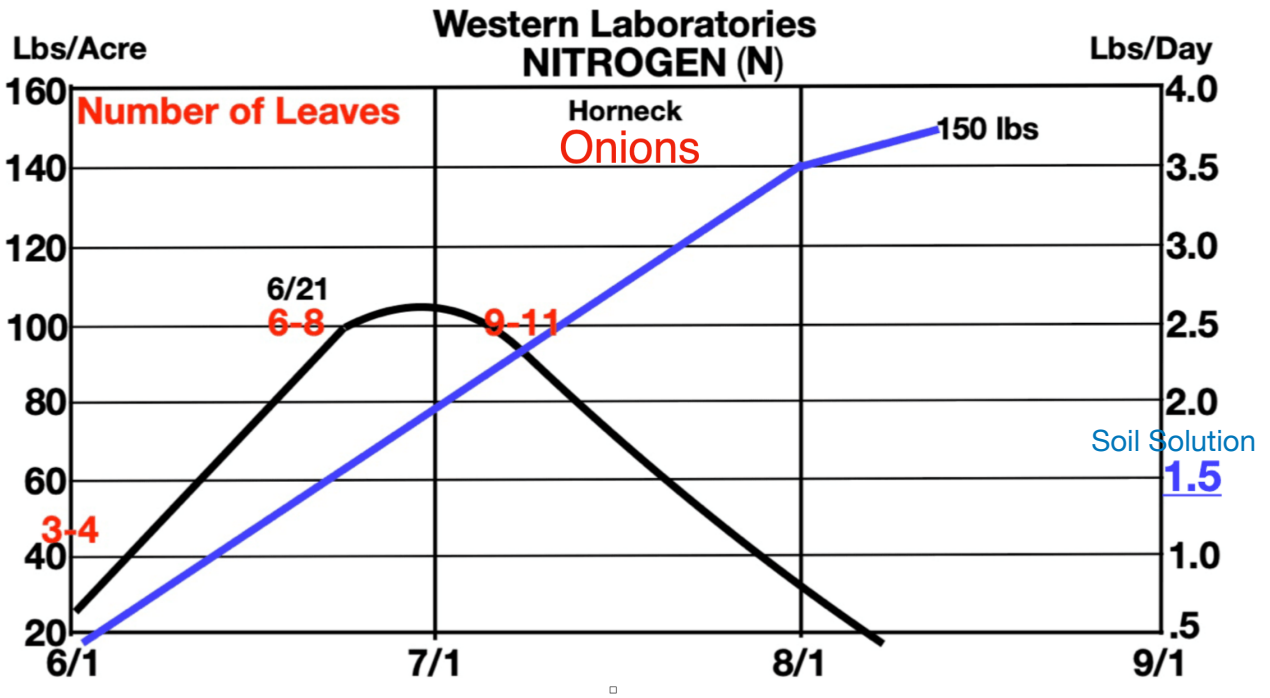
With potatoes, we test the fourth petiole for nitrates. In onions, we test the roots for nitrates. The reason why is that ammonium that is taken-in by the roots, it translocates to the leaves and quickly converted to amino acids. If your nitrate levels are low, it doesn't mean the crop is in trouble. This is why you need to know the ammonium levels.

1st, look at your crop. If the older leaves are green and not being shaded out by the canopy, you are okay.

2nd, you must know your ammonium levels. Ammonium being applied through the lines can be monitored in the soil. Early July, bacteria and fungi feed on last year's crop releasing nutrients. The first release of nitrogen is in the ammonium form and can be taken up by the crop.

Look at the nitrogen demand chart and remember that ammonium may supply much of the nitrogen needs of your crop.





Do you know where your ammoniums are?

John P Taberna
Soil Scientist