

Increasing Soluble Carbon to Reduce Nitrogen Inputs

73rd Annual Southeastern Turf Conference
Barry M. Bennett, CGCS
Redox Chemical LLC

Redox✓



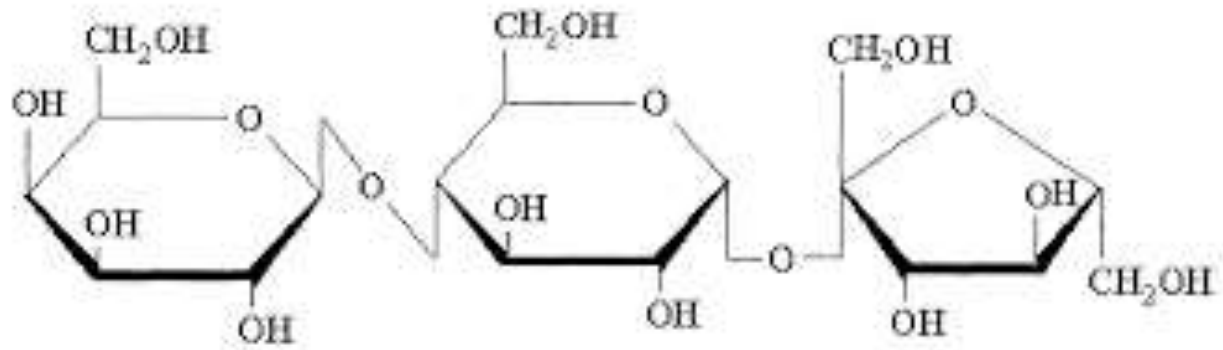






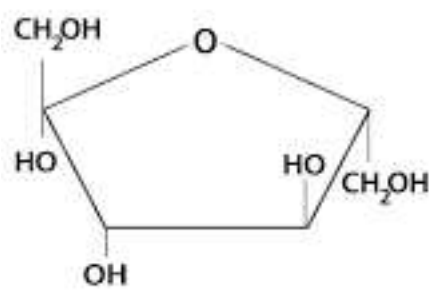
So.... what
you talking
about Willis?

[Chemical 1]

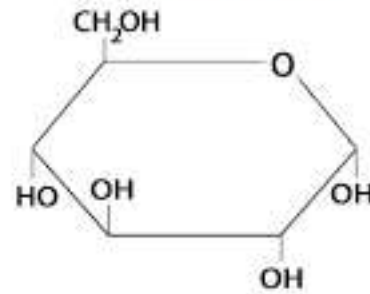


Molasses

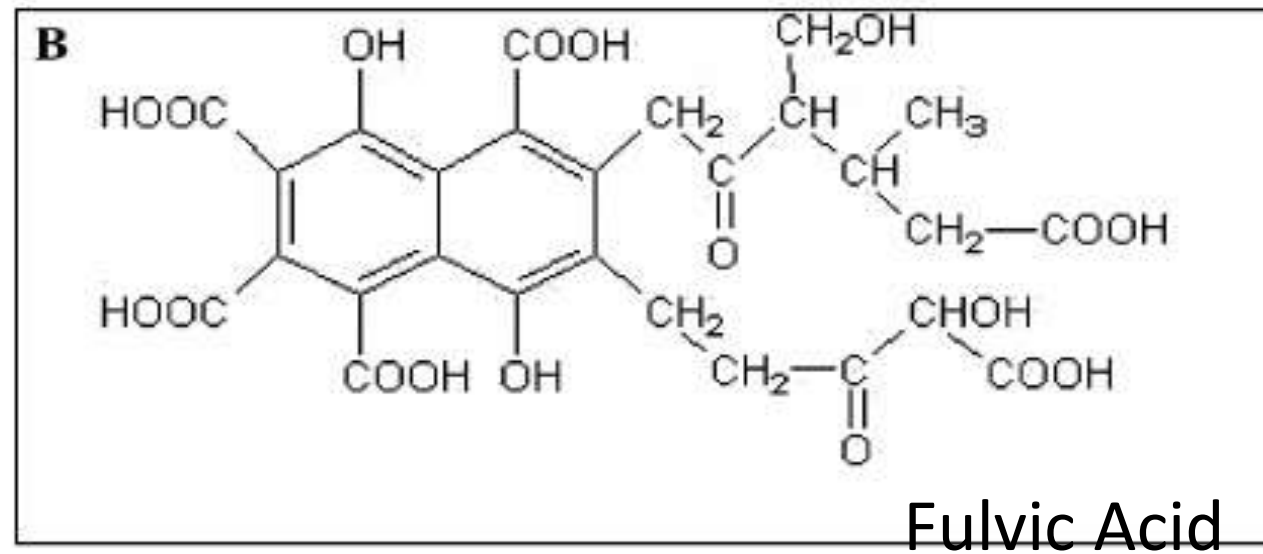
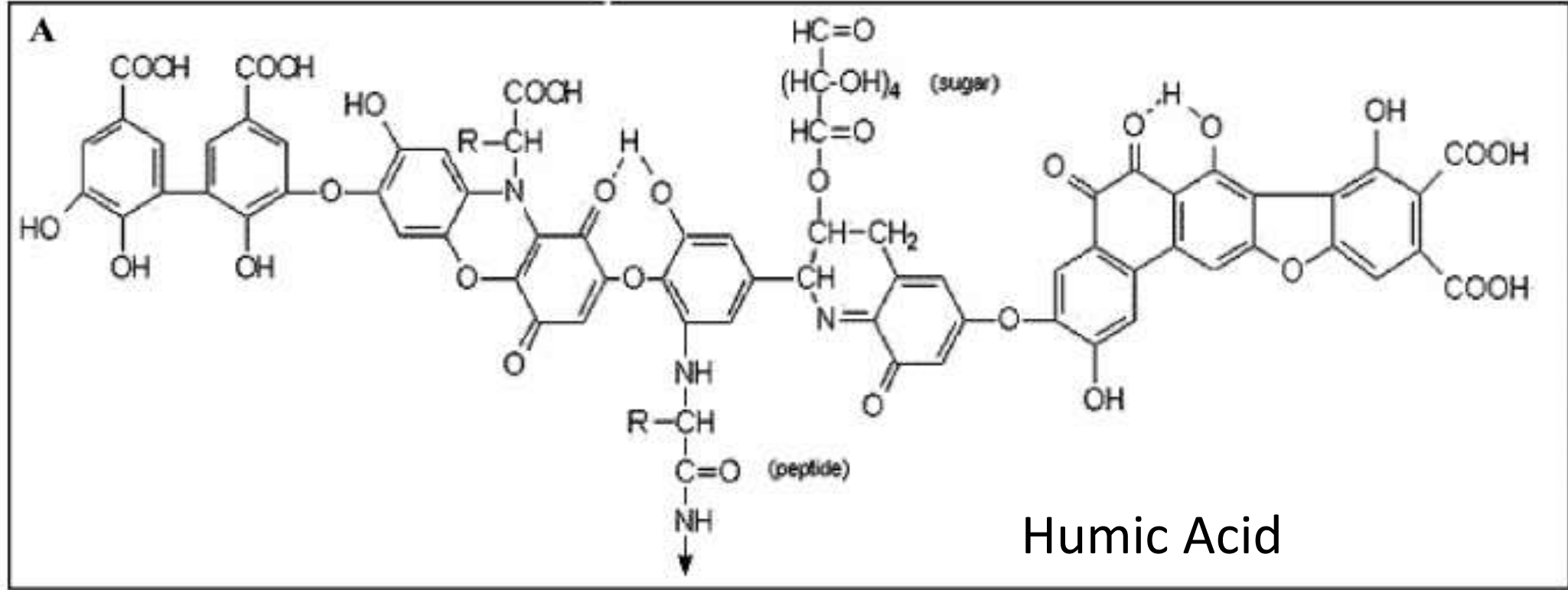
Fructose



Glucose

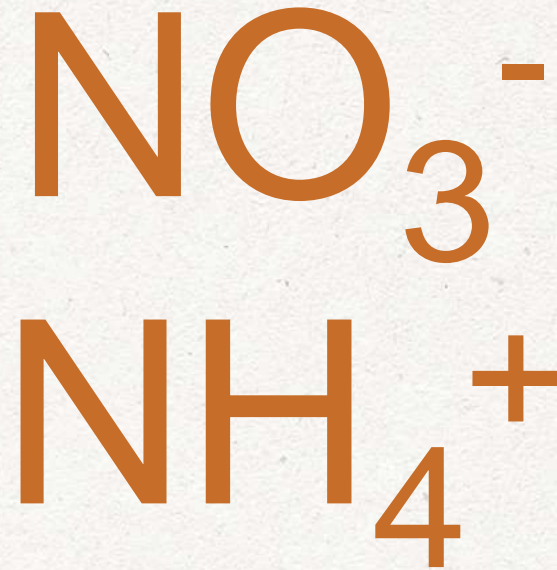


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NITROGEN

- A component of every plant cell
- Easily assimilated by plants



Nitrogen

Abused
and
Misused

Our
Enemy

Nitrogen

NH₄

NO₃

NO₃

Our
Friend



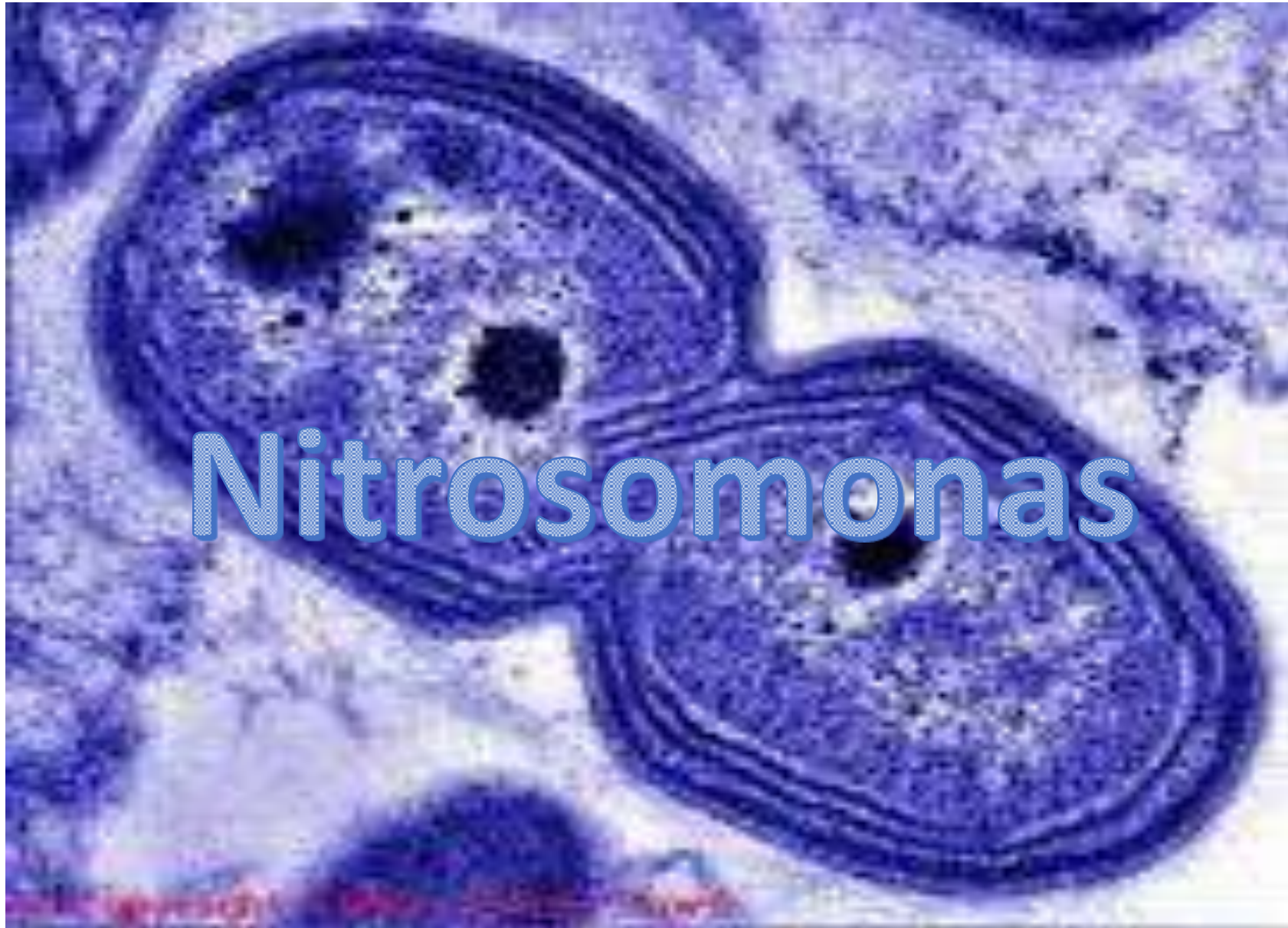
Nitrogen



Question

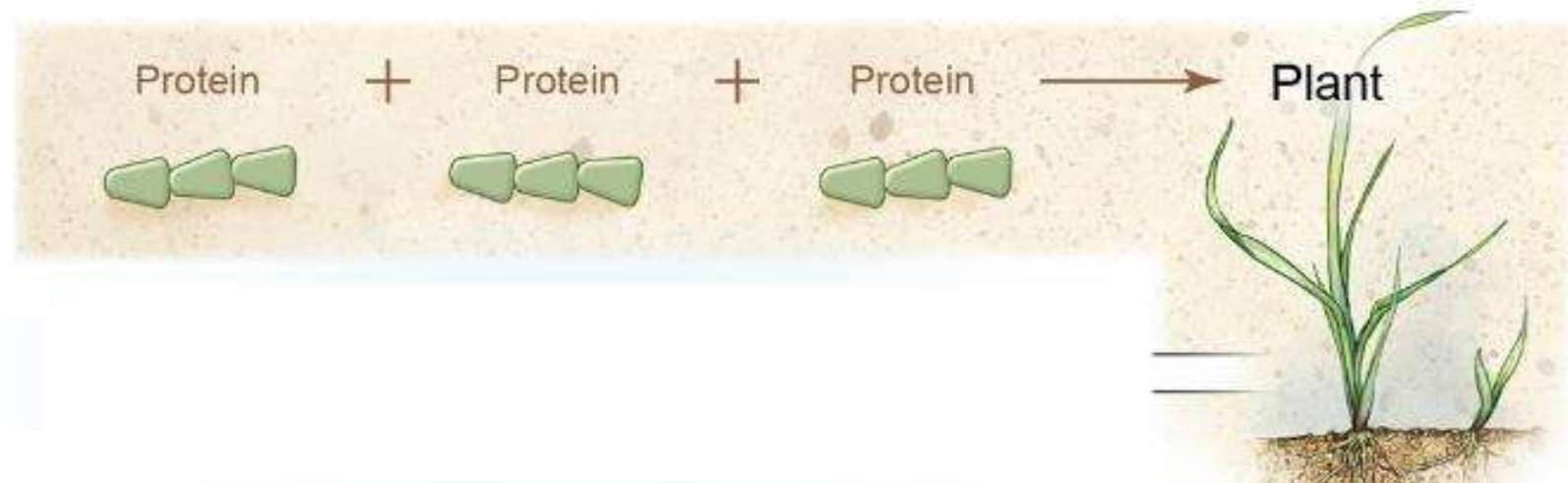
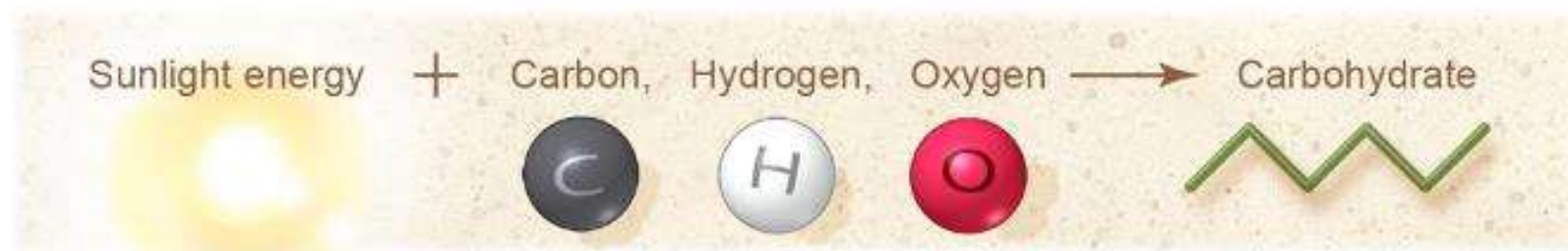
Soil bacteria convert nitrogen to what end form?

- A. Ammoniacal nitrogen with a positive charge
- B. Nitrate nitrogen with a negative charge
- C. Nitrate nitrogen with a positive charge
- D. Ammoniacal nitrogen with a negative charge

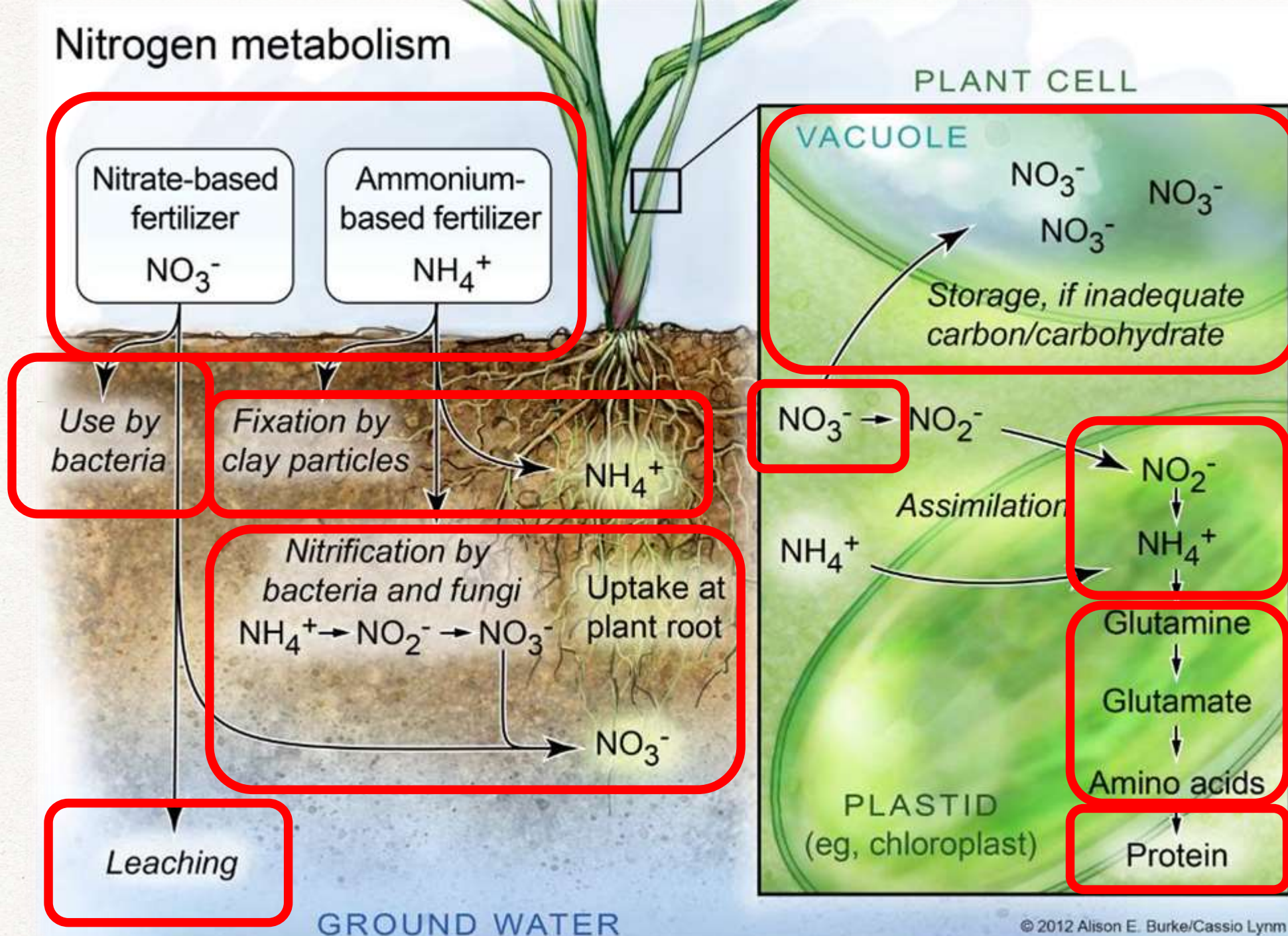


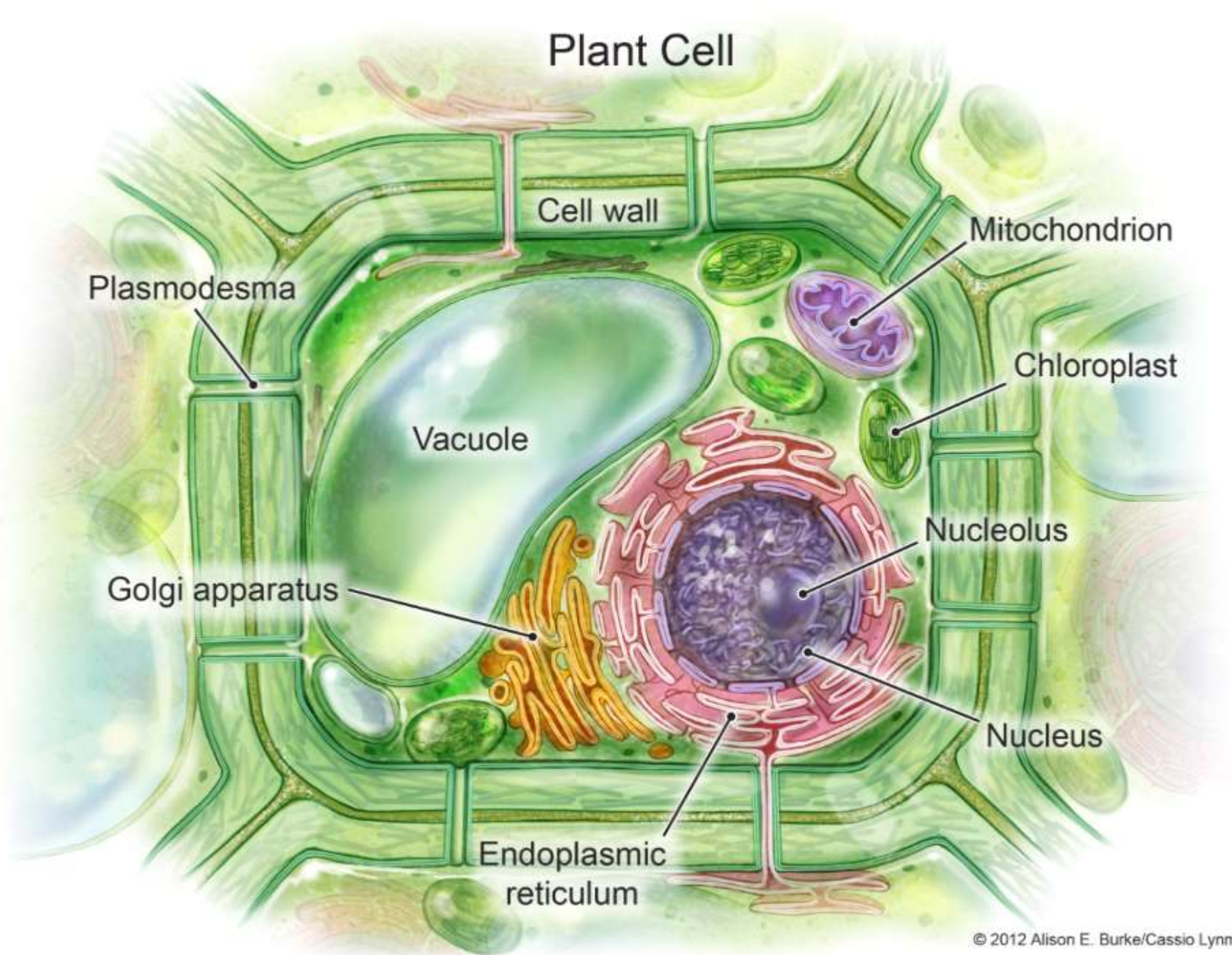


Nitrobacter



Nitrogen metabolism





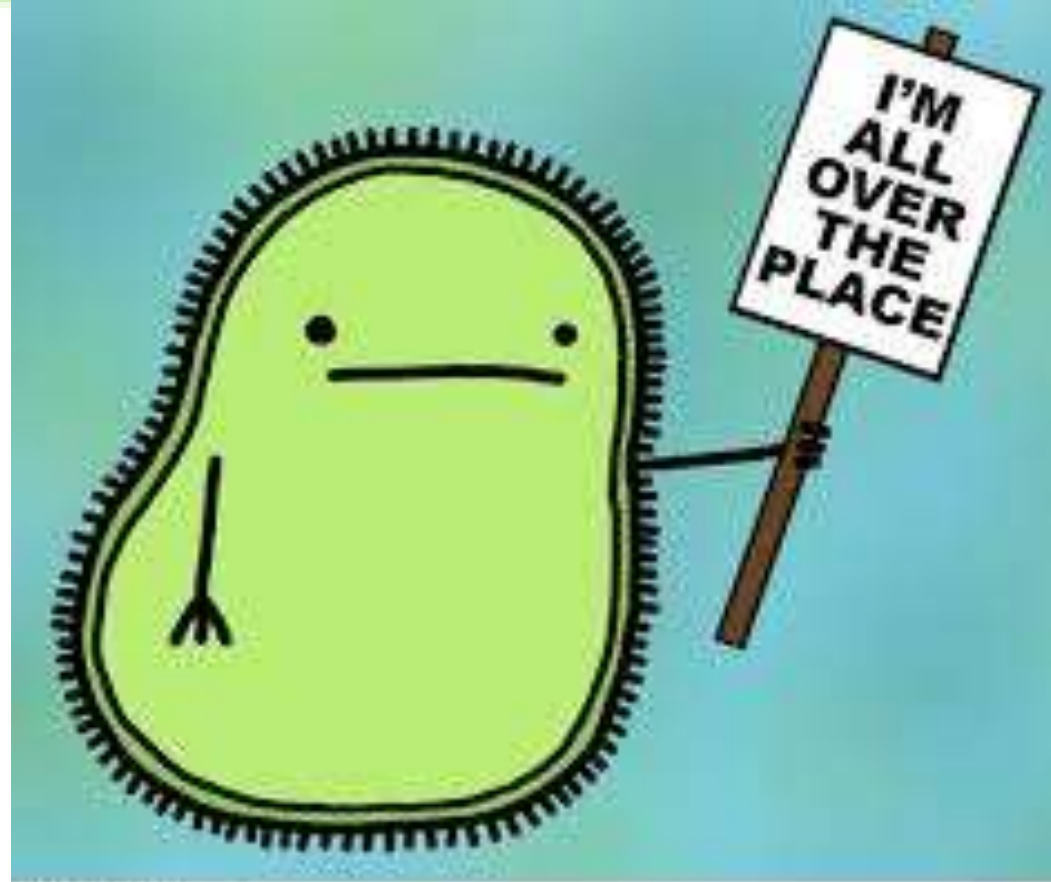
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So what is the right amount of
carbon to nitrogen ??

24:1



THAT DEPENDS ON YOU



Natalie Dee.com

(AND SOIL MICROBES)

The best way to judge carbon
content in your soils?

If there is a reduced response to nitrogen, the addition
of a soluble carbon may be beneficial