

Soil Biology and Fertility (NRM-213)

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NITROGENASE ENZYME SYSTEM

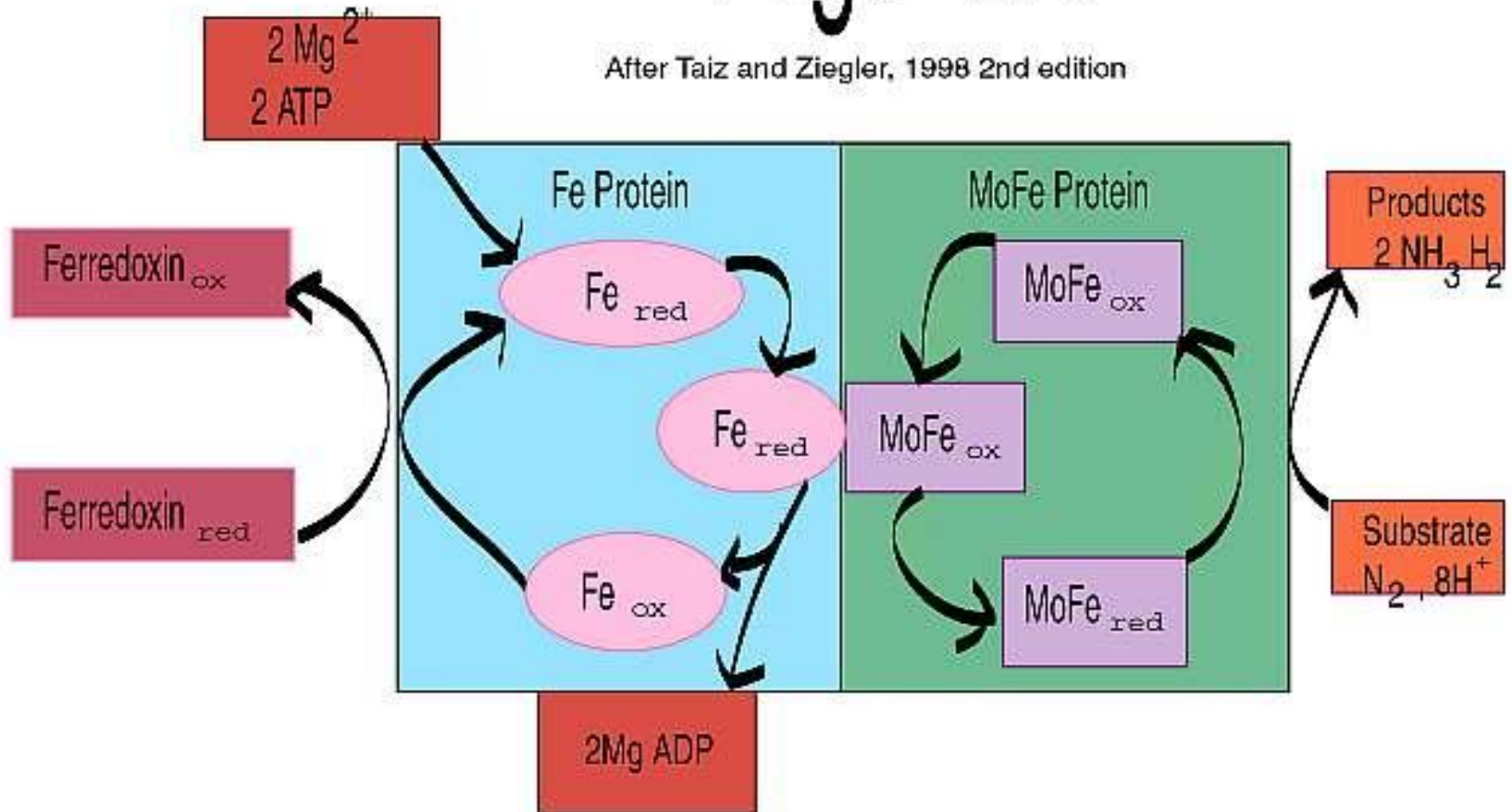
Nitrogenase enzyme system

- The nitrogenase is an enzymatic complex which enables fixation of atmospheric nitrogen.
- The nitrogenase complex exists in both free living nitrogen fixing organisms as well as in symbiotic nitrogen fixing bacteria.
- The complex converts atmospheric nitrogen to ammonia

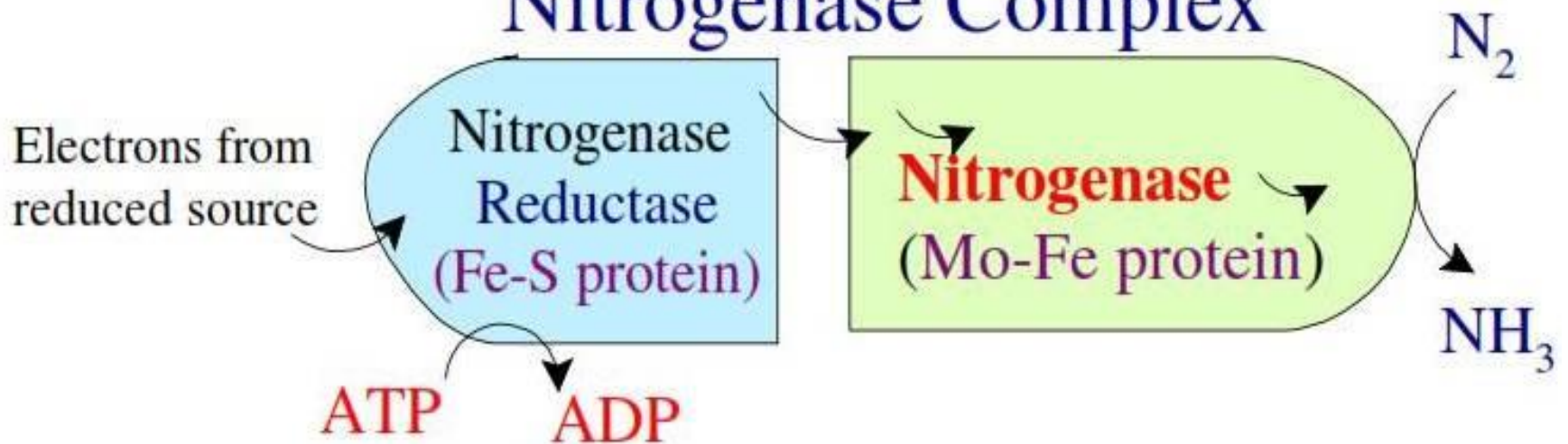


Nitrogenase

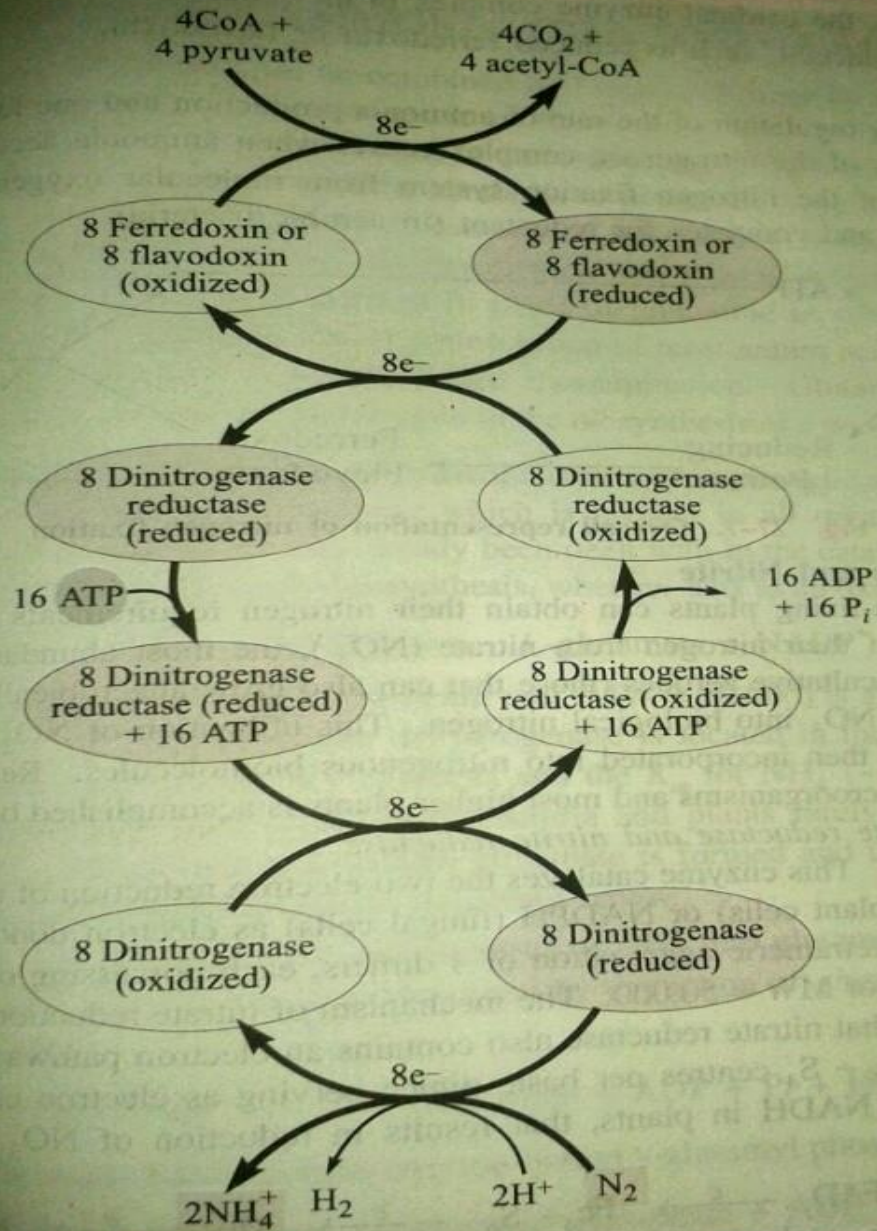
After Taiz and Ziegler, 1998 2nd edition



Nitrogenase Complex



BIOSYNTHESIS OF AM



Reference..

Websites:

- *faculty.ksu.edu.sa/76158/Documents/BCH-Lectures21.pdf*
- *people.virginia.edu/~cmg/slides/chapter_26.ppt*
- <http://www.tau.ac.il/~ecology/virtau/2-tali/The%20Nitrogenase%20complex.htm>

Books:

- Fundamentals of bio chemistry By J.L.jain, sunjay jain, nitin jain.
- Plant Physiology By S N Pandey, B K Sinha.