

# *New York Corn Producers Make a Difference!!*

## *Phosphorus Fertilizer Imports 2003-2005 Reduced by 26.7 million lbs of P<sub>2</sub>O<sub>5</sub>*

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From 2001 through 2003, the Northeast Sustainable Agriculture Research and Extension (NESARE) program, with contributions from Agway, Carovail, Pioneer Hi-Bred International Inc., AgriCulver Seeds, the New York State Natural Resources Conservation Service (NRCS), and Northern New York Agricultural Development Program (NNYADP), funded a project that evaluated phosphorus (P) needs for corn production in New York. The project consisted of on-farm and research station trials and extensive extension activities.

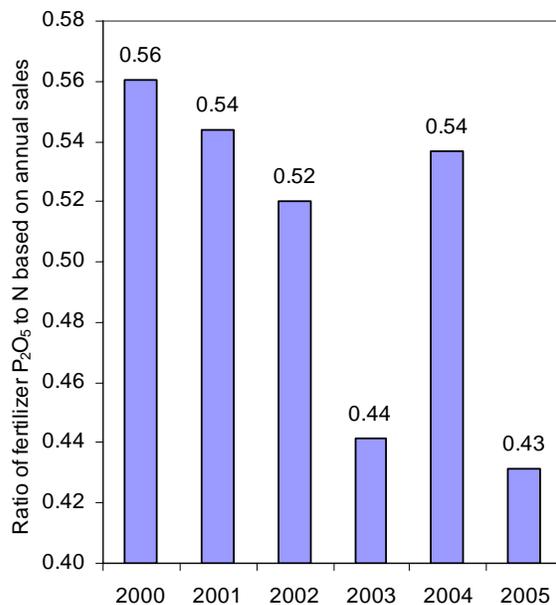
The results showed that on sites that test high in P and do not receive manure, P starter levels could be reduced to 25 lbs P<sub>2</sub>O<sub>5</sub>/acre or less. On sites that test very high in P or high P sites that receive manure, a P-free starter could be used without yield or silage quality penalty.

In 2005, New York counted about 990,000 acres of corn of which an estimated 47% test high or very high in soil test P. For these soils, a shift from standard applications of P containing fertilizers (i.e. 250 lbs/acre of 19-19-19) to a P-free starter could result in savings of 40-50 lbs P<sub>2</sub>O<sub>5</sub>/acre (\$10-\$15/acre).

In the final year of the project, a survey of over 350 corn producers showed project convinced 17% of those that replied to reduce starter P application rates. We monitored the fertilizer sales data (Department of Agriculture and Markets) for the period 2000-2005 to assess the true impact of the project.

Statewide P fertilizer use dropped from an average of 33,494 tons of P<sub>2</sub>O<sub>5</sub>/year in 2000-

2002 to 29,052 tons of P<sub>2</sub>O<sub>5</sub>/year in 2003-2005, a reduction of 4,442 tons or 8.9 million lbs of P<sub>2</sub>O<sub>5</sub>/year. In this time period nitrogen (N) sales did not go down (61,877 tons or 123.8 million lbs of N/year over the 6 year period), showing that producers did not reduce fertilizer use, but strategically selected lower P fertilizer blends!



The team work (Cornell University faculty, staff and students, Cooperative Extension field crops educators, PRODAIRY staff, corn growers, and agricultural agencies and industry), and the integrated research and extension approach helped reduce P imports into the state by a total of **13,325 tons** or **26.7 million lbs of P<sub>2</sub>O<sub>5</sub>** over the 2003-2005 period!

The **New York Starter Phosphorus Project** was initiated to evaluate and demonstrate the value of P starter application on soils testing high or very high in P. Cornell University's Nutrient Management Spear Program (NMSP) faculty and staff, PRO-DAIRY staff and Cornell Cooperative Extension educators worked together to conduct 65 on-farm and 13 research station trials between 2001 and 2003. The project was funded by a NESARE research and education grant (LNE02-173) and contributions from New York State Natural Resources Conservation Service, Agway, Carovail, Pioneer Hi-Bred International Inc., AgriCulver Seeds and the Northern New York Agricultural Development Program. For more information on the project and its impact on New York, visit: <http://nmssp.css.cornell.edu/projects/starterp.asp> or contact Quirine Ketterings at [qmk2@cornell.edu](mailto:qmk2@cornell.edu) or (607) 255-3061.