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2006 CORN AND SOYBEAN NUTRIENT HARVEST IN THE NORTHCENTRAL U.S.

In 2006, lowa had the highest average corn yields of the six states of IPNI's Northcentral U.S. Region: lowa, Illinois, Indiana, Minnesota, South Dakota, and Wisconsin. State average corn yields in 2006 ranged from 97 to 166 bu/A. Average P removal rates were 34 to 70 lb $\rm P_2O_5$ /A and quantities of K removed were 29 to 50 lb $\rm K_2O/A$. In 2006, the majority of the states showed decreased corn yields and quantities of nutrients removed. Only two states, Illinois and Indiana, were up from last year. Nationally, the U.S. average corn yield in 2006 was 149.1 bu/A, up 0.7% from 2005.

Corn: Average state yield per acre, state average P and K removal per acre, and yield and removal percent change from 2005.

	2006 avg. yield,	2006 avg. removal, lb/A		Change in yield and removal
State	bu/A	P ₂ O ₅	K ₂ O	from 2005, %
IA	166.0	62	50	-4.0
IL	163.0	70	46	14.0
IN	157.0	58	42	1.9
MN	161.0	55	31	-7.5
SD	97.0	34	29	-18.5
WI	143.0	54	41	-3.4

Sources: USDA National Agricultural Statistics Service and state Extension publications.

Soybean yields in 2006 ranged from 34 to 50.5 bu/A, with lowa again having the highest average yield. Quantities of P removed by soybean harvest ranged from 26 to 41 lb P_2O_5/A . Potassium removal was 44 to 76 lb K_2O/A . Like corn, Illinois and Indiana were the only states to see increases. Indiana's corn and soybean yield increases were similar, but in Illinois, corn yield increases far outpaced those of soybeans. U.S. soybean yields averaged 42.7 bu/A, down 0.7% from 2005.

Soybean: Average state yield per acre, state average P and K removal per acre, and yield and removal percent change from 2005.

	2006 avg. yield,	2006 avg. removal, lb/A		Change in yield and removal
State	bu/A	P ₂ O ₅	K ₂ O	from 2005, %
IA	50.5	40	76	-3.8
IL	48.0	41	62	3.2
IN	50.0	40	70	2.0
MN	44.0	36	44	-2.2
SD	34.0	26	48	-2.9
WI	44.0	39	44	0.0

Sources: USDA National Agricultural Statistics Service and state Extension publications.

Nutrient management will need to be adjusted for 2006 production levels and nutrient removal rates.Recalculating historical average yields and re-evaluating soil sampling schedules may be in order. In addition, growers should consider sampling corn and soybean grain for nutrient content to gain insight into nutrient removal rates occurring in their local area and under their management practices and environmental conditions.

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Abbreviations: P = phosphorus; K = potassium; lb = pounds; A = acre; bu = bushel

Note: Plant Nutrition TODAY articles are available online at the IPNI website: www.ipni.net/pnt