

TABLE 4
Crop Nitrogen Usage Rate Factors

Crop		Nitrogen Usage Rate	Crop	Nitrogen Usage Rate
Corn	Zone 1	0.9 lbs/bu	Orchard grass	38.0 lbs/ton
	Zone 2	1.1 lbs/bu	Tall fescue	38.0 lbs/ton
	Zone 3	1.2 lbs/bu	Switch grass	21.0 lbs/ton
Corn silage		7.5 lbs/ton	Vetch	56.0 lbs/ton
Soybeans		3.8 lbs/bu	Red clover	43.0 lbs/ton
Oats		0.75 lbs/bu	Perennial rye grass	24.0 lbs/ton
Alfalfa		50.0 lbs/ton	Timothy	25.0 lbs/ton
Wheat		1.3 lbs/bu	Wheat straw	13.0 lbs/ton
Smooth brome		40.0 lbs/ton	Oat straw	12.0 lbs/ton
Sorghum or Sudan grass		40.0 lbs/ton		

The following map outlines the three zones for the corn nitrogen usage rates indicated in the Table 4. Zone 1 corresponds to the Moody soil association. Zone 2 corresponds to the Marshall, Monona-Ida-Hamburg, and Galva-Primghar-Sac soil associations. Zone 3 corresponds to the remaining soil associations.

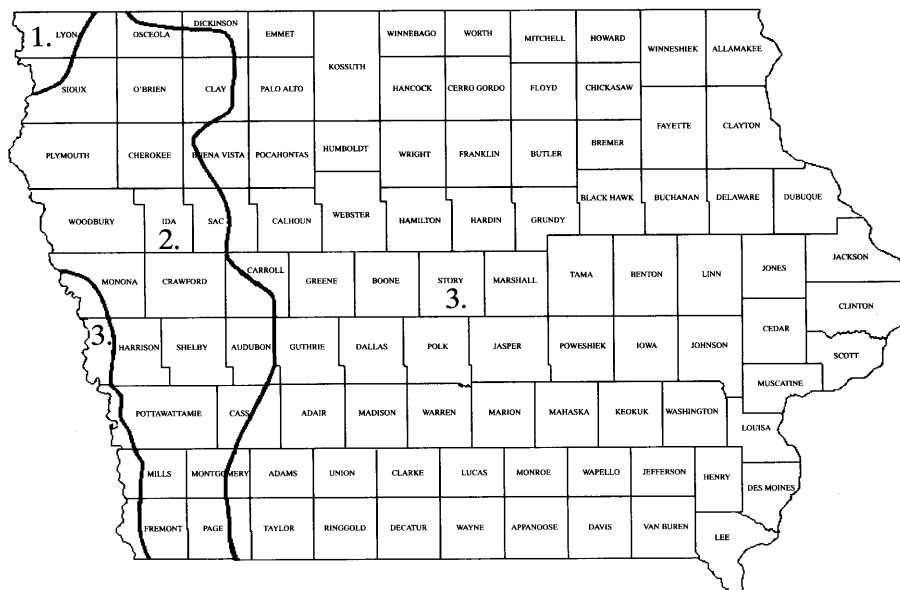


TABLE 4a
 Phosphorus Removal for Iowa Crops
 Source: PM 1688, A General Guide for Crop Nutrient and Limestone Recommendations in Iowa,
 revised October 2013

Crop	Units	P₂O₅ (pounds/unit)
Corn	bu.	0.32
Corn silage	ton (65% H ₂ O)	3.5
Soybeans	bu.	0.72
Alfalfa, alfalfa grass	ton	13
Oat	bu.	0.294
Wheat	bu.	0.55
Smooth brome	ton	7.9
Orchard grass	ton	12
Tall fescue	ton	11
Switch grass	ton	11
Sorghum-Sudan	ton	11
Red clover-grass	ton	11
Perennial rye grass	ton	11
Timothy	ton	7.9
Wheat straw	ton	3.7
Oat straw	ton	6.4