Agri Analysis Inc
a division of
Pioneer
Water Testing Laboratory Inc.

Phosphorus Source Coefficients for Use in Phosphorus Index Evaluations in the Mid-Atlantic Region

The Phosphorus Index

The Phosphorus Index is a screening tool used by soil conservation field staff and nutrient management planners. These professionals rank the vulnerability of fields used for agricultural purposes as sources of phosphorus (P) loss in surface runoff water.

Phosphorus Source Coefficient

P solubility of nutrient materials applied to the soil like dairy manure is one of the evaluation factors used to assess a site's P loss potential. The Phosphorus Source Coefficient (PSC) represents the relative proportion of the total P applied to the field that is conceivably subject to loss with drainage water. The PSC is an identifiable value to the nutrient amendment (P) and is independent of the distinguishing traits of the soil to which the amendment or manure is applied.

The following table illustrates average or book PSC values used in the Mid-Atlantic Region.

Mid-Atlantic Region P Source Coefficients (PSC) for use in P Index site evaluations.

P Source	PSC
Inorganic P fertilizer	1.0
Swine manure	1.0
Other manures (beef, dairy, poultry)	0.8

Frequently, conservation or nutrient management planners do not wish to rely on the average or "book value" for the PSC of a specific nutrient amendment that is to be applied for agricultural use. In such cases it is necessary to harvest a representative sample of the manure in question and send it to a laboratory for determining the PSC.

Agri Analysis Inc, a division of Pioneer Water Testing Laboratory will assay the manure and report the PSC value. The laboratory turn around time is 2 to 3 days.

Liquid manure kits are available complete with information sheet. Please call for additional supplies.