Selecting a Liming Material

The selection of a liming material is dependent upon several factors including the need to increase soil Ca or soil Mg concentrations, economics, material availability, desired speed of reaction and ease of use. In this section, lime type selection will be discussed solely in terms of whether to use calcitic ("Hi-Cal") or dolomitic ("Hi-Mag") agricultural grade limestone. For a more detailed discussion of liming material selection and application, see "Liming Materials and Management — Appendix APP-10" in Cooperative Bulletin No. 59: The Nutrient Management Handbook for Delaware.

In most cases, the lime requirement of the soil can be adequately met by either calcitic or dolomitic limestone and growers can make their choice based on availability and cost. However, in certain situations, it may be desirable to choose one or the other in order to have the added benefit of increasing either soil Ca or soil Mg concentration without having to apply Ca or Mg fertilizers. To determine whether a specific lime type is recommended, compare the soil test Ca and Mg values on the soil test report form with Table 8 below.

Table 8. Recommended lime type as a function of soil test Ca and Mg fertility index values.

Selection Criteria	Recommended Lime Type
Soil Test Mg less than 50 FIVs	Dolomitic ("Hi-Mag")
Soil Test Mg greater than 100 FIVs	Calcitic ("Hi-Cal")
Soil Test Mg between 50 and 100 FIVs <u>and</u> is less than Soil Test Ca	Dolomitic ("Hi-Mag")
Soil Test Mg between 50 and 100 FIVs and is higher than Soil Test Ca	Calcitic ("Hi-Cal")