PURCHASED SOIL
or
"LOAM"

We are often asked whether a purchased soil is really loam and if it will make a good lawn or garden. Unfortunately, there is no legal definition or guaranteed content for purchased soil as there is for lime and fertilizer marketed in Maine. Consumers are therefore at the mercy of contractors who may or may not be able to deliver a good quality product for the particular need of the customer.

First of all, consider using the soil you have on site already. Purchasing soil involves removing or "mining" it from one site for use at another. Even the best quality purchased soil will need some adjustment of pH, organic matter, or nutrient level before use. Often, you will be spending as much time, effort, and money on purchased soil as you would on the soil you have already. However, areas of gravel fill or with soils of high silt and clay content may benefit from a new layer of soil.

Technically speaking a true loam, as defined by the USDA Natural Resources Conservation Service, is based on sand, silt, and clay content as follows: less than 52 % sand size particles, 28 - 50% silt, and 8 - 28 % clay. A true loam has too much silt and clay to drain readily and would be a relatively poor soil to purchase for turf or garden use.

What is generally considered to be a good purchased soil is technically a sandy loam material, with less silt and clay and more sand than a true loam. In addition, the sand fraction should be predominantly coarse and medium sands (particles larger than 0.25 mm in size). A fine sandy loam will often drain quite poorly despite the fact that it is technically a sandy loam.

A good "loam" should preferably be a topsoil with sufficient organic matter to hold adequate moisture and nutrients to support plant growth. An organic matter level greater than 5 % and a cation exchange capacity (CEC) of 5 to 7 meq/100 gm. or higher is desirable. The pH, nutrient, and organic matter content should be tested and the lime, fertilizer, and organic matter amendments added before planting or seeding. Low pH or nutrient levels can usually be corrected without too much added expense. Again, most soils do need some correction of pH, nutrient levels, or organic matter content.

Check with the contractor to be sure that the soil does not come from a field that has received herbicide in the past several years. Old corn fields are especially a problem. Some herbicides have a residual life in the soil of one, two, or more years. If they are still chemically active when you seed your new lawn or plant your garden, you may lose part or all of your planting.

Ideally, the contractor will have had the soil analyzed and be willing to make a copy of the analysis available to you, though this is certainly not required. If the soil has not been analyzed it does not necessarily mean that it is poor quality. With some knowledge of what to look for and what questions to ask, many potential problems can be avoided.