

Lenoir Series, Thin Solum Variant

Soils of the Lenoir series, thin solum variant, are somewhat poorly drained and are nearly level or gently sloping. They are on stream terraces, where they formed in alluvial sediment. A seasonal high water table is at a depth of about 1 ½ feet beneath the surface. Grayish mottles are within the zone affected by the high water table.

In a typical profile, the surface layer is grayish-brown fine sandy loam about 7 inches thick. The subsoil is about 29 inches thick. The upper part of the subsoil is light yellowish-brown, friable sandy clay loam mottled with brownish yellow; the middle part is brownish-yellow, very firm clay mottled with light brownish gray; and the lower part is gray, very firm clay mottled with brownish yellow. Below the subsoil and extending to a depth of about 58 inches is gray loamy sand and coarse sand.

Natural fertility is medium, and the content of organic matter is low. Available water capacity is high. Permeability is slow, and shrink-swell potential is high. In areas that have not received lime, reaction is strongly acid or very strongly acid.

In Pitt County soils of the Lenoir series, thin solum variant, are important for farming. About half of the acreage is cultivated or in pasture, and the rest is chiefly in forest. The major limitations to use of these soils are the seasonal high water table, slow permeability, and, in places, infrequent flooding. Crops respond well to recommended applications of fertilizer and lime.

Representative profile of Lenoir fine sandy loam, thin solum variant, 0 to 3 percent slopes, 2 miles east of Belvoir, 370 feet south of State Road No. 1001, and 50 feet east of State Road No. 1402:

- Ap-0 to 7 inches, grayish-brown (10YR 5/2) fine sandy loam; weak, fine, granular structure; very friable; small roots; slightly acid; abrupt, smooth boundary.
- B1t-7 to 11 inches, light yellowish-brown (10YR 6/4) sandy clay loam; many, medium, distinct, brownish yellow (10YR 6/6) mottles; weak, medium, subangular blocky structure; friable; few small and medium roots; few medium root channels and cracks filled with grayish-brown soil material from the A horizon; few, thin, patchy clay films on faces of peds; very strongly acid; abrupt, smooth boundary.
- B21tg-11 to 20 inches, brownish yellow (10YR 6/8) clay; many, coarse, distinct, light brownish-gray (10YR 6/2) mottles; moderate, medium, angular blocky structure; very firm, plastic and sticky; few medium roots and root channels; thin, patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- B22tg – 20 to 36 inches, gray (10YR 6/1) clay; few, medium, distinct, brownish-yellow (10YR 6/8) mottles; moderate, medium, angular blocky structure; very, firm, sticky and plastic; few medium root channels; thin, patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- IIC1g-36 to 40 inches, gray (10YR 6/1) loamy sand containing lenses of clay loam; massive; very friable; very strongly acid; gradual, wavy boundary.
- IIC2g- 40 to 58 inches, gray (10YR 6/1) coarse sand; single grain; loose; sand grains coated with brownish yellow (10YR 6/8); very strongly acid; gradual, wavy boundary.

Thickness of the solum is 40 inches or less. The A horizon is 5 to 10 inches thick and is dark gray to grayish brown. The B horizon is gray, light yellowish-brown, yellowish-brown, or brownish-yellow clay, silty clay or sandy clay loam and is about 20 to 30 inches thick. The C horizon is gray loamy sand or coarse sand.

Lenoir fine sandy loam, thin solum variant, 0 to 3 percent slopes (LnA) – This is a somewhat poorly drained soil that occupies broad divides on stream terraces. It occurs in areas of irregular shape that is 5 to 20 acres in size. The surface layer is grayish-brown fine sandy loam about 7 inches thick. The subsoil is about 29 inches thick. The upper part of the subsoil is light yellowish-brown, friable, sandy clay loam mottled with brownish yellow; the middle part is

brownish-yellow, very firm clay mottled with light brownish gray; and the lower part is gray, very firm clay mottled with brownish yellow.

Included with this soil in mapping were small eroded areas and areas of soils that have similar profile but that have a surface layer of silt loam or loam. Also included were small areas of Craven and Roanoke soils.

Infiltration is moderate. Runoff is slow.

This soil is fairly easy to keep in good tilth, but it can be satisfactorily worked only within a fairly narrow range of moisture content. About half of the acreage is cultivated or in pasture, and the rest is chiefly in forest. Infrequent flooding occurs for brief periods, and wetness is a severe limitation. If this soil is properly drained, however, it is fairly well suited to most of the locally grown crops. Artificial drainage is needed for optimum returns from all crops. Areas that are farmed are used mainly for corn, soybeans, small grain, and pasture. Capability unit IIIw-4; woodland suitability group 2w8.