

Brazos County, Texas

DeA—Derly-Rader complex, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: d5xt
Elevation: 230 to 700 feet
Mean annual precipitation: 32 to 42 inches
Mean annual air temperature: 63 to 70 degrees F
Frost-free period: 230 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

Derly and similar soils: 69 percent
Rader and similar soils: 31 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Derly

Setting

Landform: Depressions on stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Clayey alluvium of quaternary age derived from mixed sources

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 16 inches: clay loam
H3 - 16 to 44 inches: clay loam
H4 - 44 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 6.0
Available water capacity: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: D

Ecological site: R087AY003TX - Claypan Savannah

Hydric soil rating: Yes

Description of Rader**Setting**

Landform: Stream terraces

Landform position (three-dimensional): Tread

Microfeatures of landform position: Mounds

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Loamy alluvium of pleistocene age derived from mixed sources

Typical profile

H1 - 0 to 9 inches: fine sandy loam

H2 - 9 to 19 inches: fine sandy loam

H3 - 19 to 24 inches: clay loam

H4 - 24 to 65 inches: clay

H5 - 65 to 80 inches: clay

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 24 to 48 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Gypsum, maximum content: 2 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 10.0

Available water capacity: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C

Ecological site: R087AY005TX - Sandy Loam

Hydric soil rating: No

Data Source Information

Soil Survey Area: Brazos County, Texas
Survey Area Data: Version 19, Jun 11, 2020