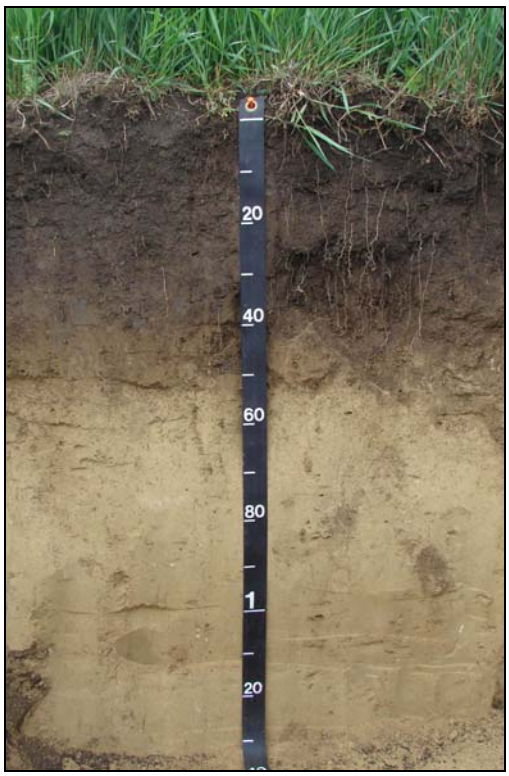
Location: University Farm, Józsefmajor

GPS Coordinates: N 47° 41.730, E 19° 36.519
Elevation: 139 m
Topography: Gently undulating (G)
Slope: 3%

Parent material: loess
Temperature regime: Mesic
Soil moisture regime: Ustic
Land use: Annual field cropping (AA)



Profile Description

Ap Dark grayish brown (10YR4/2), very dark grayish brown (10YR3/2) moist, clay loam. Slightly sticky, very compacted, hard when dry. The upper part of the horizon is platy, the lower part has strong medium prismatic structure. No effervescence. Clears smooth boundary.

AB Brown (10YR4/3), dark brown (10YR3/3) moist, clay loam. Fine subangular structure. Slightly sticky and plastic Abundant wormholes and casts. Organic matter coatings on peds. No effervescence. Gradual wavy boundary.

Bk Light brownish gray (10YR6/2), grayish brown (10YR5/2) moist, clay loam. Weak medium subangular blocky structure. Friable, slightly sticky, slightly plastic. Calcium carbonate accumulation in forms of fine powdery coatings, and fillings of pores and root channels. Common wormholes, casts, crotovinas. Few broken loess snails. Gradual smooth boundary.

2CBk Pale brown (10YR6/3), brown (10YR5/3) moist, loam. Weak medium subangular blocky structure. Friable, nonsticky. Calcium carbonate accumulation in forms of fine powdery coatings, fillings of pores and root channels and hard nodules (~1cm). Soft, friable.

Analytical data

Genetic horizon	Depth (cm)	pH H_2O	SOM (%)	$CaCO_3$ (%)	CEC cmol/kg	B %	% Sand 2-0.05 mm	% Clay <0.002 mm	Texture	Bulk Density (g cm^{-3})
Ap	0-30	6.1	1.5	0	28	84	34	32	Clay loam	1.5
AB	30-50	6.9	1.6	0	30	89	35	37	Clay loam	1.3
Bk	50-90	7.13	0.5	9	18	100	34	32	Loam	1.3
2CBk	90-150	7.9	0.4	25	14	100	49	29	Sandy clay loam	1.2

SOM – Soil Organic Matter, CEC - Cation Exchange Capacity, B% - Base Saturation

WRB diagnostics:	mollic, cambic, calcic horizons
WRB Reference Soil Group:	Chernozems
WRB prefix qualifiers:	calcic
WRB suffix qualifiers:	-
WRB name:	**Calcic Chernozem**
Hungarian SC:	Chernozem with pseudomycilia
Soil Taxonomy:	**Fine siltic mixed superactive mesic pachic Vermustoll**