SOIL MONOLITHS

WINERY GRUBER

March 2016

Dipl.Ing. Gottfried Wieshammer, Technisches Büro für Bodenkultur
www.boden-monolithe.at, gottfried.wieshammer@aon.at

Soil Monolith

Winery Gruber

soil type: **brownish tschernosem**

geological parent material: Loess

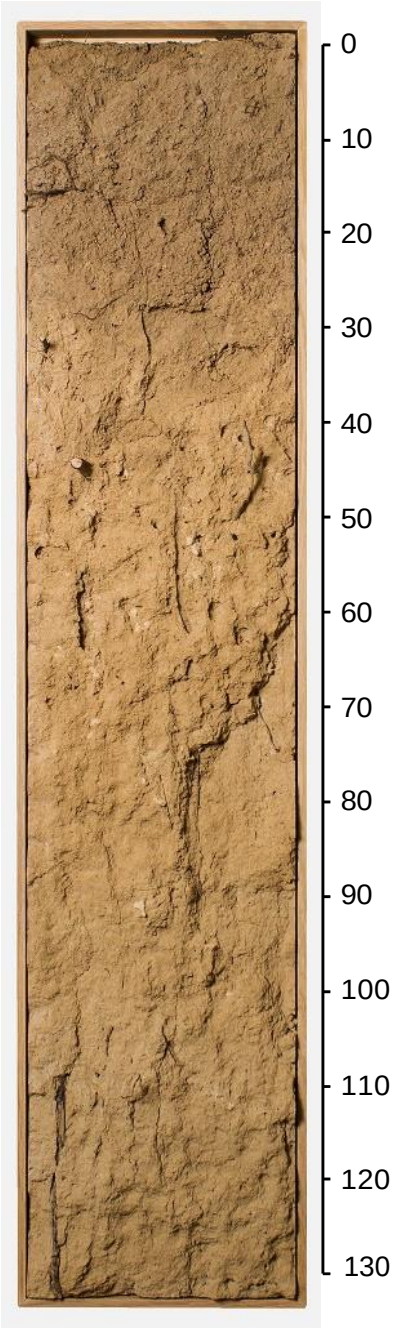
Soil profile description

Ap 0 - 25 cm,
Soil type of the fine soil: **silty loam,** soil horizon darkly colored by humus, very reduced coarse fraction through tillage, calcareous

ABC 25 - 35 cm,
Soil type of the fine soil: **silty loam,** in this transitional horizon are humus deposits (A-horizon), as well as brown coloring (B-horizon) and loess as parent material of the soil formation (C-horizon) is recognizable,
very reduced coarse fraction, calcareous

BC 35 - 65 cm,
Soil type of the fine soil: **silty loam,** loess as parent material of the soil formation, light brown coloring through the new formation of ferric oxides and ferric hydroxides is recognizable, despite the presence of lime.
Strong earthworm activity, lime precipitation (*Lösskindln* = little loess children), reduced coarse fraction, calcareous

C 65 - 135 cm,
Soil type of the fine soil: **silty loam,** loess as parent material of the soil formation, lime precipitation (*Lösskindln* = little loess children),
very reduced coarse fraction, strongly calcareous



29 x135 cm
Photo: grafikfranz.at

DI Gottfried Wieshammer, Technisches Büro für Bodenkultur
0699/11 11 43 95, gottfried.wieshammer@aon.at

Soil Monolith

Winery Gruber

soil type: **brownish slope soil**

geological parent material: granite

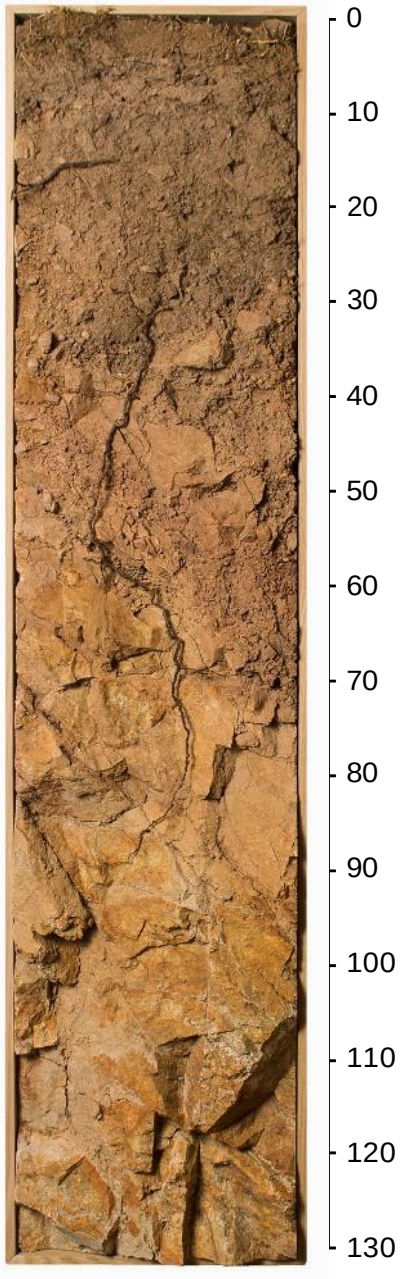
Soil profile description

Ap 0 - 10 cm,
Soil type of the fine soil: **silty sand,**
soil horizon darkly colored by humus intermixed through soil cultivation,
high coarse fraction, lime-free

BC 10 - 35 cm,
Soil type of the fine soil: **sand,**
through lengthy weathering and soil formation processes, soil was created out of solid granite. Brown coloring through the new formation of ferric oxides and ferric hydroxides.
Next to newly-formed brown fine soil, also recognizable are the remains of strongly weathered granite,
very high coarse fraction, lime-free

C1 35 - 65 cm,
Soil type of the fine soil: **sand,**
Granite as parent material of the soil formation.
Through lengthy physical and chemical weathering processes, the granite has become very brittle,
beginning brown coloring through newly-formed ferric oxides and ferric hydroxides,
predominating coarse fraction, lime-free

C2 65 - 130 cm,
Soil type of the fine soil: **-**
Relatively little weathered granite as parent material of the soil formation,
recognizable on the fracture surfaces is a beginning brown coloring through newly-formed
ferric oxides and ferric hydroxides,
predominating coarse fraction, lime-free



29 x131 cm
Photo:grafikfranz.at

DI Gottfried Wieshammer, Technisches Büro für Bodenkultur
0699/11 11 43 95, gottfried.wieshammer@aon.at

Soil Monolith

Winery Gruber

soil type: **lime-free brown soil**

geological parent material: granite

Soil profile description

Ap 0 - 15 cm,
Soil type of the fine soil: **loamy sand,**
soil horizon darkly colored by humus intermixed through soil cultivation,
moderate coarse fraction, lime-free

B 15 - 45 cm,
Soil type of the fine soil: **loamy sand,**
through lengthy weathering and soil formation processes, soil was created out of solid granite.
Brown coloring through newly-formed ferric oxides and ferric hydroxides,
moderate coarse fraction, lime-free

BC 45 - 65 cm,
Soil type of the fine soil: **sand,**
Transition between the upper B-horizon and underlying C-horizon.
Next to the newly-formed brown fine soil, still recognizable are the remains of strongly weathered granite in the original position,
very high coarse fraction, lime-free

C 65 - 135 cm,
Soil type of the fine soil: **- ,**
Granite as parent material of the soil formation.
Through lengthy physical and chemical weathering processes, the granite has become very brittle,
a crevasse filling of quartz that evolved in the sound granite rock can still be recognized,
predominating coarse fraction, lime-free

29 x135 cm
Photo:grafikfranz.a

DI Gottfried Wieshammer, Technisches Büro für Bodenkultur
0699/11 11 43 95, gottfried.wieshammer@aon.at

Soil Monolith

70

Winery Gruber

80

90

100

110

120

130

DI Gottfried Wieshammer, Technisches Büro für Bodenkultur
0699/11 11 43 95, gottfried.wieshammer@aon.at