



SOLURILE DIN BANATUL MONTAN

Aplicație de teren RO-SK-CZ

21-24 Aprilie 2017

MOUNTAIN BANAT SOILS

Field application RO-SK-CZ

21st-24th April 2017



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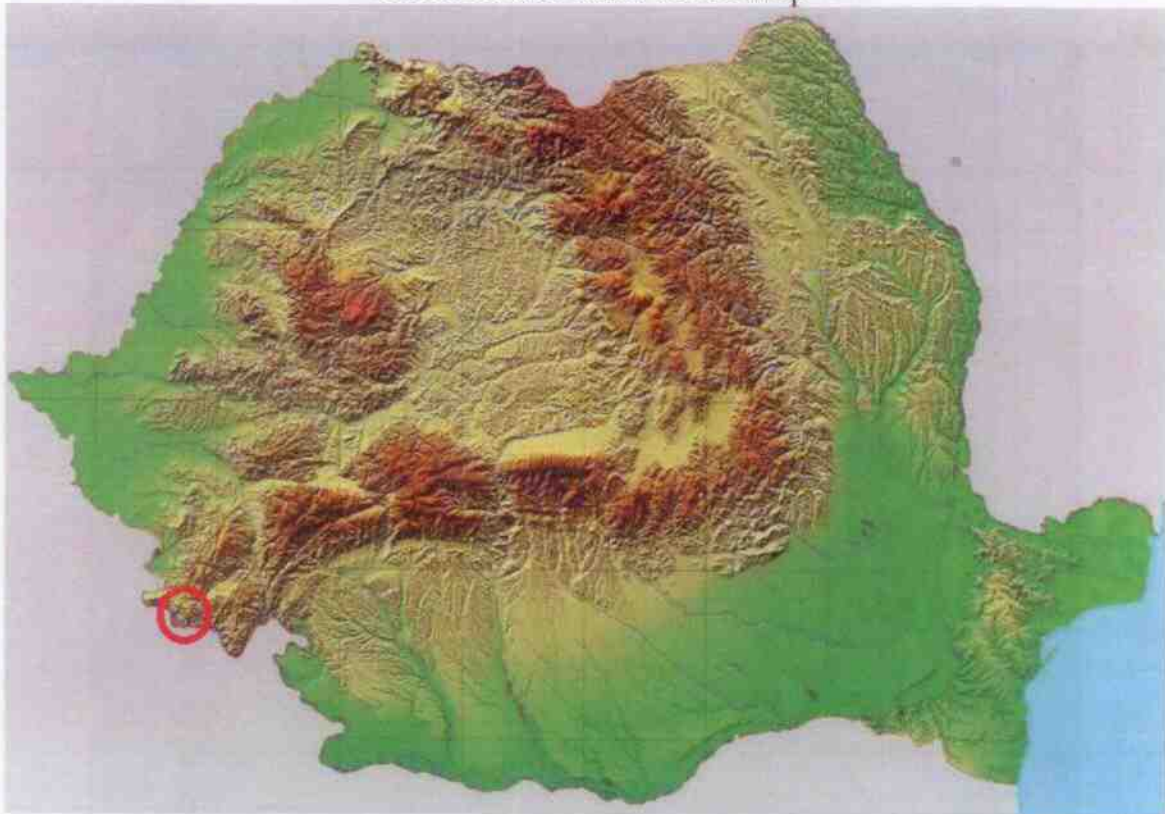
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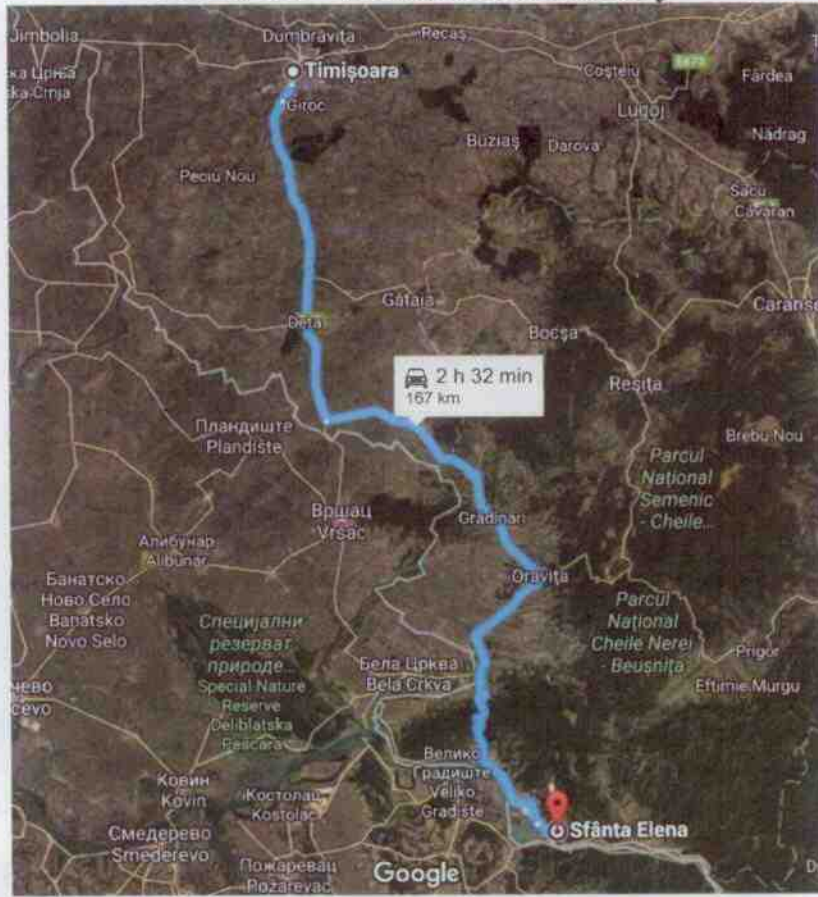
Romania-the main relief map



Banat-the main relief map



Timisoara – Sfanta Elena itinerary



Sfanta Elena – Garnic itinerary



Location of soil profiles – Sfanta Elena



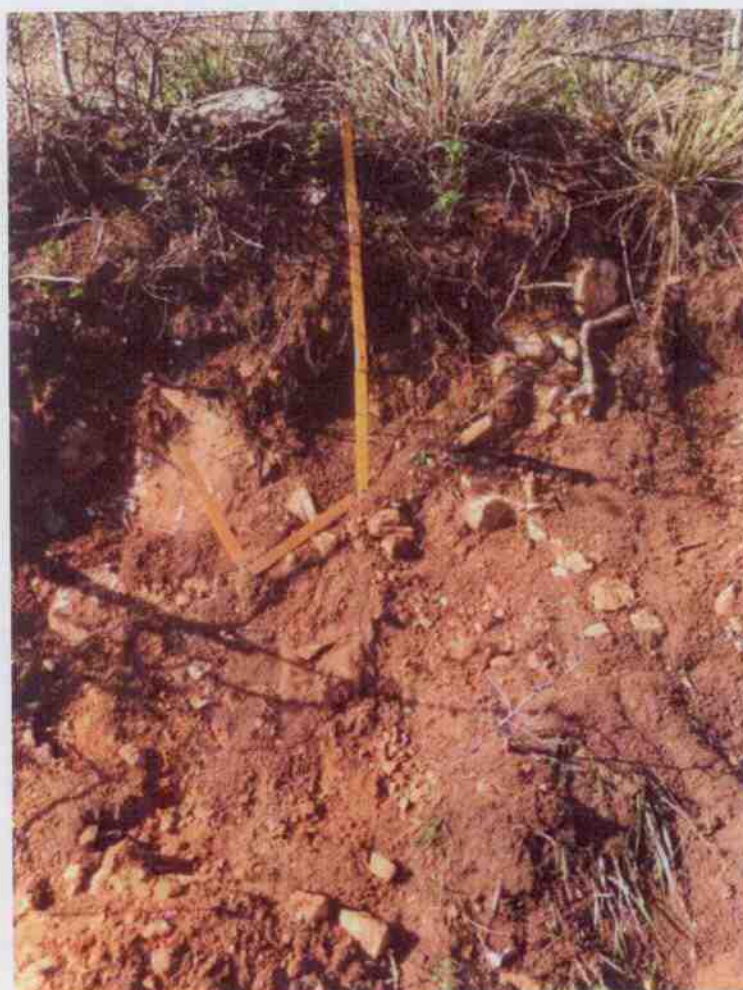
Location of soil profiles - Garnic



Soil profile P1

RENDZINA CAMBICA (SRTS - 2012)
RENDZIC LEPTOSOLS (WRB - 2014)

Horizon		A tel	Am	AR
Depth	cm	0-4	-30	-52
Particle size analysis				
Coarse sand (2,0 - 0,2 mm)	%	1,9	3,7	2,7
Fine sand (0,2 - 0,02 mm)	%	15,1	16,0	10,0
Silt (0,02 - 0,002 mm)	%	27,5	25,6	28,0
Colloidal clay (sub 0,002 mm)	%	55,5	54,7	59,3
Physical clay (sub 0,01 mm)	%	75,6	69,4	79,2
Calcium carbonate	%	0,42	0,88	3,81
pH _{H2O}	unit.pH	7,86	8,00	8,07
Humus	%	4,84	4,02	3,51
Exchangeable bases (SB)	me/100g sol			
Total acidity (SH)	me/100g sol			
Cation exchange capacity (T)	me/100g sol			
Degree of base saturation (V)	me/100g sol			



Soil profile P2

EUTRICAMBOSOL MOLIC (SRTS - 2012)

CAMBISOLS CALCARIC (WRB - 2014)

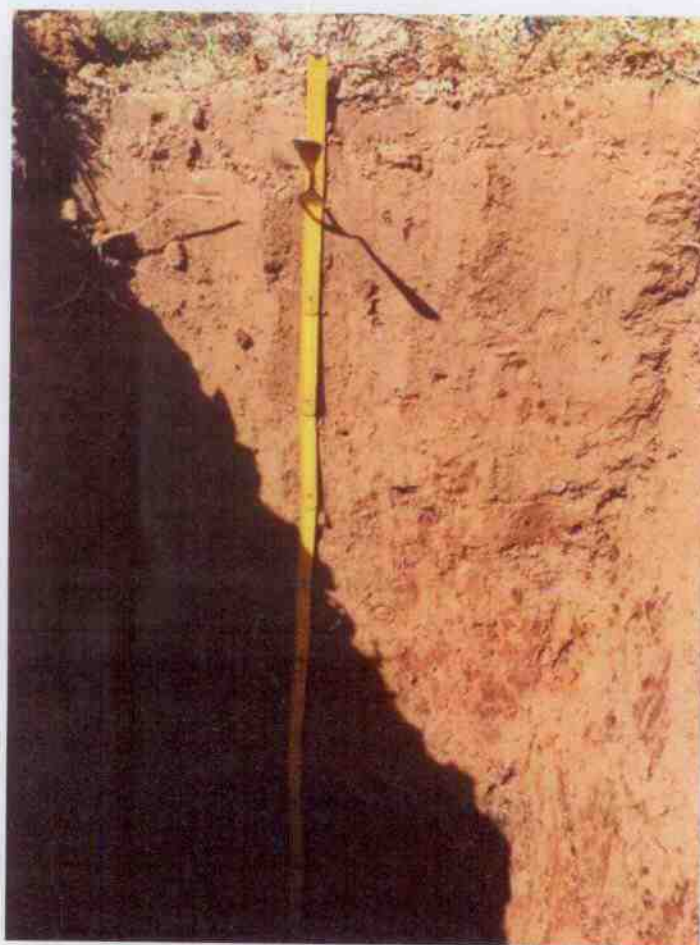
Horizon		Ap	Am	AB	Bv	BR
Depth	cm	0-23	-30	-40	-80	-100
Particle size analysis						
Coarse sand (2,0 - 0,2 mm)	%	1,5	2,5	2,2	1,1	0,7
Fine sand (0,2 - 0,02 mm)	%	26,1	24,8	21,7	20,6	17,8
Silt (0,02 - 0,002 mm)	%	35,5	36,5	36,2	35,0	32,5
Colloidal clay (sub 0,002 mm)	%	36,9	36,2	39,9	43,3	49,0
Physical clay (sub 0,01 mm)	%	58,9	57,6	62,3	64,8	70,9
Calcium carbonate	%	0,42	0,21			
pH _{H2O}	unit.pH	7,64	7,34	7,11	6,55	7,53
Humus	%	3,45	3,00	1,19		
Exchangeable bases (SB)	me/100g sol				20,81	
Total acidity (SH)	me/100g sol				3,15	
Cation-exchange capacity (T)	me/100g sol				23,96	
Degree of base saturation (V)	me/100g sol				86,85	



Soil profile P3

EUTRICAMBOSOL STAGNIC (SRTS - 2012) CAMBISOLS STAGNIC suplim. COLLUVIC (WRB - 2014)

Horizon		Ap	Aow ₂	ABw ₃	Bv w ₃	BC	CB
Depth	cm	0-20	-33	-46	-68	-100	-120
Particle size analysis							
Coarse sand (2,0 - 0,2 mm)	%	2,9	3,8	4,3	4,6	4,1	3,2
Fine sand (0,2 -0,02 mm)	%	23,1	22,8	18,7	17,5	16,7	19,9
Silt (0,02 - 0,002 mm)	%	42,2	41,4	35,3	34,5	28,7	35,4
Colloidal clay (sub 0,002 mm)	%	31,8	32,0	41,7	43,4	50,5	41,5
Physical clay (sub 0,01 mm)	%	55,0	55,6	62,3	64,6	68,2	52,7
Calcium carbonate	%					0,85	2,11
pH H ₂ O	unit.pH	6,33	6,71	6,96	6,46	7,71	7,83
Humus	%	1,83	1,18	0,79			
Exchangeable bases (SB)	me/100g sol	17,17	16,78	20,24	20,62		
Total acidity (SH)	me/100g sol	2,7	1,9	1,85	2,05		
Catio ⁺ -exchange capacity (T)	me/100g sol	19,87	18,68	22,09	22,07		
Degree of base saturation (V)	me/100g sol	86,41	89,82	91,62	93,42		



Soil profile P4

EUTRICAMBOSOL TIPIC (SRTS - 2012) CAMBISOLS EUTRIC (WRB - 2014)

Horizon		Ap	Bv	Bv	BC
Depth	cm	0-15	-34	-60	-90
Particle size analysis					
Coarse sand (2,0 - 0,2 mm)	%	1,9	2,2	3,0	1,9
Fine sand (0,2 - 0,02 mm)	%	22,3	20,7	20,3	14,2
Silt (0,02 - 0,002 mm)	%	40,4	43,2	40,3	30,7
Colloidal clay (sub 0,002 mm)	%	35,4	33,9	36,4	53,2
Physical clay (sub 0,01 mm)	%	60,3	57,5	59,6	70,5
Calcium carbonate	%	0,42	0,42	0,42	0,21
pH _{H2O}	unit.pH	7,52	7,39	7,36	7,79
Humus	%	2,14	1,42		
Exchangeable bases (SB)	me/100g sol				
Total acidity (SH)	me/100g sol				
Cation-exchange capacity (T)	me/100g sol				
Degree of base saturation (V)	me/100g sol				

