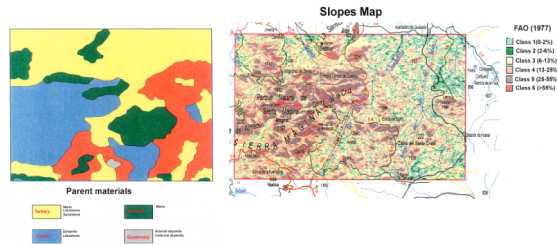
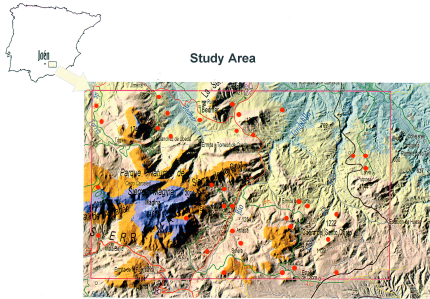


EVALUATION OF OLIVE-ORCHARD SOILS OF MAPE PAGE (948) (TORRES, SE. SPAIN)

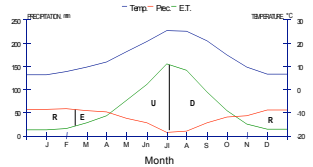
Menjivar, J. C.¹, Aguilar, J.²; García, I.², Bouza, P.³

- 1.- Escuela de Agrónomos . Universidad de Teucigalpa (Honduras)
- 2.- Dpto de Edafología y Química Agrícola. Facultad de Ciencias. Univ. de Granada (España)
- 3.- Centro Nacional Patagónico. CONICET. Puerto Madryn, Chabut (Argentina)

Soil Forming Factors



Climate
Temperature regime: from mesic to thermic
Moisture regime : xeric



Calcaric Regosol

Profiles

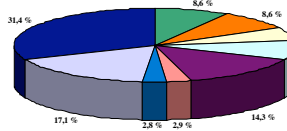


Calcaric Leptosol



Calcaric Cambisol

Soil Classification



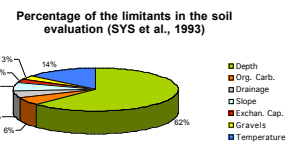
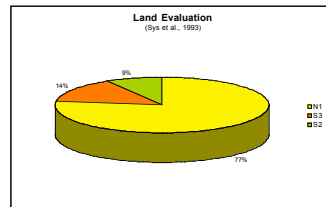
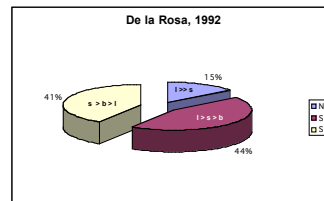
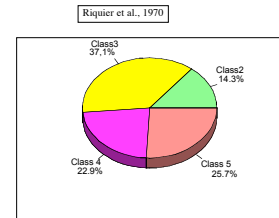
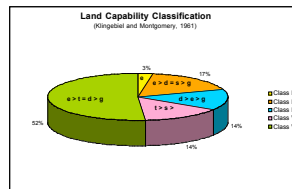
- Calcaric Leptosols (caLP)
- Endopetric Calcisols (ptCL)
- Epipetric Calcisols (ptpCL)
- Hypercalcic Calcisols (cchCL)
- Haplic Calcisols (haCL)
- Chromic Luvisols (crLV)
- Vertic Cambisols (vrCM)
- Calcaric Cambisols (caCM)
- Calcaric Regosols (caRG)

Results of the different evaluation methodologies

Soil	LCC	Riquier et al.1970	FCC 1982	De la Rosa, et al.1992	Aguilar 1995	SYS et 1993	Soil type
20	Vied	5	L'Ra'kic'	Ni	3 d	N1d	caLP
22	Vied	5	L'Ra'kic'	Ni	3 d	N1d	caLP
57	Vied	5	L'Rdb'	Ni	4 sg	N1d	caLP
33	Illdg	3	L'a'kc'	S2l	2 P	N1d	ptCL
42	Ilise	3	L'a'kc'	S3s	2 P	N1d	ptCL
55	Vie	3	L'Ra'c'	S3l	3 O	N1d	ptCL
34	Illd	5	L'Ra'k	Ni	3 d	N1d	ptCL
54	Viet	3	C'Ra'k'	S3l	2 P	N1d	ptCL
44	Ive	4	L'a'k	S2s	2 P	N1d	cchCL
46	Illdg	2	L'a'kc'	S3l	2 P	N1d	cchCL
48	Illed	4	L'a'kc'	S3l	2 O	N1d	cchCL
10	Ivd	5	L'a'kc'	S2b	2 P	N1d	haCL
37	Vie	3	L'a	S2l	3 O	N1d	haCL
41	Ivd	3	C'a'k	S2s	3 O	N1d	haCL
43	Vie	4	L'a'k	S3s	3 s	N1d	haCL
52	Illdg	4	L'a'c'	S3b	3 s	N1d	haCL
45	Vs	2	L'a'k	S3s	3 s	N1d	crLV
29	Vt	3	Ca'vk	S2s	2 s	S3d	vrCM
9	Vie	2	C'a'c'	S2ab	2 P	S2Tm	caCM
21	Vietg	2	C'a'kc'	S3l	4 sg	S2Tm	caCM
32	Vie	2	L'a'kc'	S2s	2 P	S2Tm	caCM
36	Illed	4	L'a'kc'	S2s	3 O	N1d	caCM
38	Ilise	4	C'a'c'	Ns	3 s	N1d	caCM
47	Ilise	3	C'a	S3s	3 s	N1Tm	caCM
19	Viedt	5	C'a'kc'	S2l	2 d	N1d	caRG
25	Vie	3	C'a'kc'	S2s	3 c	S3O	caRG
31	Vie	3	C'a'k	S3s	3 s	S3d	caRG
35	Vie	5	L'a'kc'	S2b	2 s	S3d	caRG
39	Vt	3	Ca'kc'	S3l	2 P	N1d	caRG
40	Vit	5	C'a'kc'	S2l	2 d	N1d	caRG
49	Viet	5	C'a'c'	S2ab	3 P	N1d	caRG
51	Ivd	3	Ca'c'	S3b	3 P	N1d	caRG
53	Vie	5	L'a'c'	S2b	3 O	S3O	caRG
56	Ivled	4	Ca'c'	S3l	2 s	N1d	caRG
59	Ivlg	3	L'a'c'	S3b	3 P	N1d	caRG

a = xeric and moisture reserve < 100 mm; a = xeric and moisture reserve > 100mm; b = biotimatic deficiency; c = CaCO₃ > 30%; C = clay texture in soil surface; c = CaCO₂; d = depth; dg = gravel content in depth; e = erosion; g = gravel content; k = deficiency in potassium; l = soil factor; L = loam texture in surface; O = organic carbon content; P = precipitation; R = continuous hard layer; s = slope; sg = gravel content in soil surface; t = texture; Tm = mean annual temperature; v = vertic characteristics; w = cation exchange capacity < 7 mol/kg

Conclusions



No soil was exempt of limitants for agricultural use

References:

Aguilar, J.; Fernández, J.; Rodríguez, T. 1995. Jerarquización de parámetros edáficos en la evaluación de la productividad del olivo. Edafología. 1 nº 1. 101-110

Buol, S.W., Sanchez, P.A., Cate, R.B. and Granger, M.A.1975. Soil fertility capability classification: a technical soil classification system for fertility management. In Bonemiszka, E. and Alvarado A. (Ed.) Soil management in tropical America. N. C. State Univ., Raleigh, NC: 126-145

De la Rosa, D.; Moreno, J.A.; García, L.V. & Almorza, J. 1992. MicroLEIS: A microcomputer-based Mediterranean land evaluation information system. Soil Use & Management 8, 89-96.

Klingebiel, A. A. & Montgomery, P.H. 1961. Land capability classification, USDA Agricultural hand book 210. US Government Printing Office, Washington, DC.

Riquier, J.; Bramao, L. and Cornet, S.P. 1970. A new system of soil appraisal in terms of actual and potential productivity: FAO Soil Resources No 38. Rome. Italy

Sanchez, P.A. 1982. The Fertility Capability Classification System. Geoderma. 27. 283-309.

Sys, C., Van Ranst, E., Debaveye, J & Beernaert, F. 1993. Land evaluation, Part 3: Crop requirements. Agricultural Publications 7. General Admin. Develop. Coop., Brussels.