



Date:

Place:

SOIL EVALUATION

It is recommended that at least one physical property, one chemical property, and one biological property are evaluated. At the end of the evaluation, mark the property that needs to be improved as a priority.

Property		Tests <i>Mark the applied test(s)</i>	POOR	MODERATE	GOOD
PHYSICAL PROPERTIES	Texture <input type="checkbox"/> Coarse <input type="checkbox"/> Medium <input type="checkbox"/> Fine	Texture/ring method – Texture/ribbon method			
	Structure	Structure/observation – Structure – slake test			
	Compaction, drainage	Compaction/Mottles – Penetration resistance – Infiltration test			
	Soil moisture*				
CHEMICAL PROPERTIES	Soil pH	LDD-kit – pH strips – Red cabbage extract – Vinegar/Baking soda			
	Organic matter	OM/Colour – OM/peroxyde			
	Nutrient availability*	Nutrient availability			
	Salinity*	Electrical conductivity/			
	Presence of allophanes (Al)*	Volcanic ashes			
	Presence of carbonates *	Carbonates			
BIOLOGICAL PROPERTIES	Roots observation	Roots observation			
	Earthworms, meso and macrofauna*	Earthworms counts			
	Decomposition of the organic matter*	OM decomposition			

* optional

RECOMMENDED MANAGEMENT PRACTICES

For more details on how to improve soil properties, refer to posters' numbers given in the table

	Improve physical properties	Improve chemical properties	Improve biological properties
Avoid heavy machinery when not necessary (to avoid compaction)	P13c	P13c	P6
Reduce tillage	P6; P9b		
Optimize irrigation (water quality and water use efficiency)	P6; P10b; P13c	P13c	
Choose crop rotation	P6; P10b; P9c	P6; P10b	
Choose mixed cropping (possibly with legumes)	P6; P10b; P9c	P6; P10b	
Use mulch, crop residue or cover crops	P6; P10b; P9b; P9c; P13c	P6; P10b; P13c	
Avoid overgrazing (rotate the grazing area or reduce the number of animals per unit area)	P10b	P10b	P10b
Prefer organic fertilizers	P10b	P10b	
Make a sustainable use and management of plant nutrients (right time, source, place and rate)	P6; P10b; P11b; P13c	P6; P10b; P11b; P13c	P11b
Practice halophyte agriculture (in case of saline soils)	P13c	P13c	
Add chemical amendments Such as lime or gypsum (in case of sodic soils)	P13c	P13c	
Improve water percolation (in case of sodic soils)	P13c	P13c	