



Module 10: Management of biotic and abiotic stresses in extreme environments

Theme	Subject	Hours	Teacher
Soil	Extreme environments: soil description and functioning Main causes of soil degradation: erosion, salinization, desertification)	8	Tambone / Borin
	Low input techniques for management and restoration of degraded soils		
	Agroecologic vegetable gardens in Sahrawi camps (Algeria - Sahrawi Refugees Camps)	2	Limonta / Di Lello
Plant physiology	Definition of principal abiotic stressors for plants in extreme environments	8	Sacchi
	Plant responses to abiotic stressors (drought, salt, nutritional deficiencies): exclusion and tolerance strategies		
	Appropriate low input techniques for facing principal abiotic stressors		
Plant protection	Description of the main biotic stressors for plants in extreme environments and low-tech responses	4	Bianco / Montagna / Borin
	Use of biocontrol in contexts characterized by limited availability of technical means	4	
	Tools for remote detection and identification of parasitic adversities as a means of knowledge exchange and containment	4	
Participatory selection and improvement of crop varieties	Genetic improvement of self-pollinated crops (breeding method, bulk-pedigree method, etc.)	2	Pilu
	Population improvement of cross-pollinated crops and hybrid development	2	Pilu
	Multiplication methodologies and best practices for postharvest conservation	2	Pilu
	ICARDA Evolutionary populations and participatory wheat variety improvement in Ethiopia	4	Ceccarelli
	Crowd Data Sourcing for participatory breeding and improvement of locally adapted varieties	4	De Santis
Module conclusion	Evaluation and feed-back	2	
	Total Hours	46	
	<i>Standard teaching</i>	<i>30</i>	
	<i>Seminar</i>	<i>14</i>	
	<i>Workshop</i>	<i>0</i>	