



**14th MEETING OF THE FAO-CIHEAM
SUB-NETWORK ON MEDITERRANEAN PASTURES
AND FODDER CROPS**



New Approaches for Grassland Research in a Context of Climate and Socio-Economic Changes

Samsun (Turkey), 3-6 October 2012



PROGRAMME and LIST OF POSTERS

Organised by:
Agricultural Faculty – Ondokuz Mayıs University
Mediterranean Agronomic Institute of Zaragoza – International Centre for Advanced
Mediterranean Agronomic Studies (IAMZ-CIHEAM)





Programme

Day 1: 3 October 2012

08:00 – 09:00 Registration

09:00 – 09:45 Opening ceremony

09:45 – 10:40 Introductory Session

An overview of fodder resources and animal production in Turkey – *A. Koc, Ataturk Univ., Turkey*

Overview on grassland and farming systems in Samsun area – *Z. Acar, Ondokuz Mayıs Univ., Turkey*

Reform of the CAP: Progress for grasslands and livestock farming? – *A. Peeters, RHEA, Coordinator FAO-CIHEAM Network on Pastures and Forage Crops*

10:40 – 11:00 Coffee break

11:00 – 12:30 Session 1. Climate change and grasslands: Impacts, adaptation and mitigation

Chairperson – *A. del Pozo, Univ. of Talca, Chile*

11:00 – 11:30 Guest speaker – *A. Hopkins, GES Consulting, United Kingdom*

11:30 – 12:30 Short oral presentations

Developing a coherent monitoring system for Mediterranean grasslands – *M. Louhaichi, ICARDA, Syria*

Grassland management options under Kyoto Protocol Article 3.4. The Portuguese case study – *T. Valada, IST-Technical Univ. of Lisbon, Portugal*

Production and persistence of Mediterranean perennial grasses under contrasting climatic scenarios – *F. Volaire, CEFE, INRA-CNRS, France*

Influence of water deficit on growth parameters of perennial grass species – *M. Karatassiou, Aristotle Univ. of Thessaloniki, Greece*

12:30 – 14:00 Lunch

14:00 – 15:00 Session 1 (cont.)

14:00 – 14:30 Session 1. Posters viewing

14:30 – 15:00 Session 1. Discussion and synthesis

15:00 – 18:30 Session 2. Selection of pasture and forage species under climate and socio-economic changes

Chairperson – *F. Volaire, CEFE, INRA-CNRS, France*

15:00 – 15:30 Guest speaker – *M. Norton, NSW DPI, Australia*

15:30 – 17:00 Short oral presentations

Quality and dry matter yield of Triticale forage in winter and late-spring in Southwestern Spain – *S. Rodrigo, Univ. of Extremadura, Spain*

Performance of some tall fescue varieties grown under Algerian semi arid conditions – *M. Mefti, Univ. of Blida, Algeria*

Bio-agronomic traits of *Psoralea bituminosa* and *P. morisiana* accessions collected in Sardinia – *C. Porqueddu, CNR-ISPAAAM, Italy*

Variation in seed yield and morphological traits in Turkish grass pea (*Lathyrus sativus*) genotypes – *U. Basaran, Bozok Univ., Turkey*

Agronomic evaluation of introduced accessions of *Vicia narbonensis* L. under contrasting environments and two years period – *A. Zoghلامي, INRAT, Tunisia*

Messina (*Melilotus siculus*), a new annual pasture legume for Mediterranean-type climates with high tolerance of both salinity and water logging – *P. Nichols, Western Australia Dep. of Agriculture and Food, Australia*

- 17:00 – 17:30 Coffee break
- 17:30 – 18:00 Session 2. Posters viewing
- 18:00 – 18:30 Session 2. Discussion and synthesis
- 20:00** **Welcome reception** at the garden of the Black Sea Agricultural Research Institute (shuttles will depart from Tepe Hotel at 19:15)

Day 2: 4 October 2012

Mid-Meeting technical tour, to visit two contrasted areas in the province of Samsun: (i) the Kizilirmak Delta, a wetland ecosystem where rich natural habitats coexist with grazing livestock (mainly, sheep, cattle and water buffaloes) and intensive cropping, and (ii) the mountainous area of Ladik, with traditional animal husbandry systems based on forage resources of different types (valley meadows, forest and alpine pastures).

Day 3: 5 October 2012

09:00 – 11:45 Session 3. Role and management of permanent grasslands

Chairperson – *L. Sulas, CNR-ISPAAM, Italy*

09:00 – 09:30 Guest speaker – *C.O. Sabanci, Ahi Evran Univ., Turkey*

09:30 – 10:30 Short oral presentations

The effect of soil microtopographic gradients on dry matter yields and species richness in two Mediterranean pastures – *C. Aguiar, CIMO, Instituto Politécnico de Bragança, Portugal*

Effects of juniper encroachment on herbage production and biodiversity in a natural grassland: Preliminary results – *A. Kyriazopoulos, Democritus Univ. of Thrace, Greece*

Effect of herd mobility on the species composition and productivity of plant communities in the northern Mediterranean region of Morocco – *Y. Chebli, INRA Tanger, Morocco*

Effects of grazing on the traits of a potential fire in a Sardinian wooded pasture – *G. Re, CNR-ISPAAM, Italy*

10:30 – 10:45 Coffee break

10:45 – 11:15 Session 3. Posters viewing

11:15 – 11:45 Session 3. Discussion and synthesis

11:45 – 12:15 Session 4. Changes in Mediterranean farming systems to meet new socio-economic scenarios

Chairperson – *E. Acikgoz, Uludag Univ., Turkey*

11:45 – 12:15 Guest speaker – *A. Nezaoui, ICARDA, Tunisia*

12:15 – 13:45 Lunch

13:45 – 15:45 Session 4 (cont.)

13:45 – 14:45 Short oral presentations

An evaluation of overall fodder production in extensive silvopastoral systems with different cover of shrub understory. The case of Iberian dehesas – *G. Moreno, Univ. of Extremadura, Spain*

Impacts of climate change on the small ruminants farming systems in north western Tunisia and adaptation tools – *A. Brahmi, ESA Kef and INAT, Tunisia*

Determination of the socio-economic factors that affect the sustainable pasture management in Central Anatolia region of Turkey – C. Cevher, *Field Crops Central Research Institute, Turkey*

Effects of the economic crisis on sheep farming systems: A study case from the north Evros region, Greece – T. Manousidis, *Democritus Univ. of Thrace, Greece*

14:45 – 15:15 Session 4. Posters viewing

15:15 – 15:45 Session 4. Discussion and synthesis

15:45 – 16:00 *Coffee break*

16:00 – 17:30 Round Table – Mediterranean grassland research: Priorities and future challenges

Chairperson – C. Porqueddu, *CNR-ISPAAAM, Italy*

Panellists:

S. Ates, ICARDA, Syria

G. Moreno, Univ. of Extremadura, Spain

A. Kyriazopoulos, Democritus Univ. of Thrace, Greece

A. del Pozo, Univ. of Talca, Chile

P. Nichols, Western Australia Dep. of Agriculture and Food, Australia

17:30 – 18:30 Final Session and closure

- *22nd International Grasslands Congress 2013, Australia*

- *Arrangements for the 15th Sub-network Meeting 2014, France*

- *Other networking issues*

20:00 Social dinner

Day 4: 6 October 2012

Optional post-Meeting tour (organisation conditioned to the number of people who wish to participate) to the ancient city of Amasya, where traditional Ottoman architecture and cliff carved tombs dating from the Pontus kings period can be found. Agricultural production is important in the area, so a visit to a milk processing plant near the city is also planned.

The estimated time of return to Samsun is 19:00 hours.

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List of posters

Session 1. Climate change and grasslands: Impacts, adaptation and mitigation

S1-01	Preliminary results on climate change evidence from coprolites of <i>Myotragus balearicus</i> Bate 1909 (Artiodactyla, Caprinae)	<i>L. Rivera, E. Baraza, J. Alcover, P. Bover, C. Retuerto, X. Martínez and J. Bartolomé</i>
S1-02	Vulnerability to Climate Change of Turkana pastoralists of dry savanna	<i>F. López-i-Gelats, J. Bartolomé and M. Rivera-Ferre</i>
S1-03	Economic effects of the changing regime of autumn rains onto sheep breeding farms	<i>G. Dono, L. Giraldo and R. Cortignani</i>
S1-04	Dehydration tolerance and drought survival of summer dormant Moroccan ecotypes of cocksfoot (<i>Dactylis glomerata</i>)	<i>R. Kallida, N. Shaimi and F. Volaire</i>
S1-05	Effect of limited water supply on <i>Melilotus officinalis</i> nutrient content	<i>P. Kostopoulou, M. Karatassiou and N. Barbayannis</i>
S1-06	Competition in an alfalfa-tall fescue mixture under Mediterranean conditions	<i>M. Lazaridou, P. Kostopoulou and M. Karatassiou</i>
S1-07	Competition for soil water among trees, shrubs and pasture in Iberian Dehesas. Consequences for pasture and tree productivity	<i>G. Moreno, V. Rolo and E. Cubera</i>
S1-08	REFORMA: a new project for identification and selection of resilient, water- and energyefficient forage and feed crops for Mediterranean agricultural systems	<i>P. Annicchiarico, C. Porqueddu, B. Julier, L. Pecetti, K. Abbas, A. Abdelguerfi, A. Bouizgaren, E.C. Brummer, J. Burstin, T. Hayek and I. Thami-Alami</i>
S1-09	Impact of climate variability on the role and management of wetlands in the Middle Atlas (Afenourir area)	<i>M. Qarro and M. Ezzahiri</i>
S1-10	Policy approaches to grassland in planning documents of Ministry of Food Agriculture and Livestock in Turkey	<i>İ. Dede and C. Şerefoğlu</i>
S1-11	Agro-pastoral production system of Egypt. Climate change, vulnerability and opportunities for poverty alleviation	<i>H.R.M. Metawi</i>

Session 2. Selection of pasture and forage species under climate and socio-economic changes

S2-01	Comparative estimation of crude protein, phenols and tannins concentration of <i>Lotus corniculatus</i> growing in different habitats	<i>P. Giagourta, Z.M. Parissi, A.P. Kyriazopoulos and E.M. Abraham</i>
S2-02	Agricultural traits of blue grass accessions in Black Sea Region of Turkey	<i>I. Ayan, Z. Acar, E. Gulumser, S. Arslan, M. Can and O. Tongel</i>
S2-03	The determination of pasture type alfalfa lines	<i>S. Altinok, M. Türk, T. Erol and E. Akçelik Somay</i>
S2-04	Technical culture of kenaf produced under Tunisian semi arid conditions	<i>H. Ammar, M.A. Lahyeni, R. Lahsoumi, M. Ben Younes and S. Lopez</i>
S2-05	A new annual summer forage crop: Cowpea	<i>I. Ayan, M. Can, S. Arslan, Z. Acar and H. Mut</i>
S2-06	Selection of two triticale varieties for forage-end use in Tunisia	<i>S. Benyoussef, S. Abidi and R. Jlidi</i>

S2-07	Growth rates, biomass yield and forage quality of three local Poaceae in Annaba's region, North East Algeria	M. Boudelaa, S. Slimani, A. Ladjama, M. Benkadour and I. Nadjeh
S2-08	Behaviour of some alfalfa populations from algerian oasis	A. Chaabena, M. Laouar, I. Boudebous, I. Cahouki, F. Bentebba, H. Madani and A. Abdelguerfi
S2-09	Evaluation of lambs propensity towards different accessions of <i>Psoralea</i>	M. Decandia, M. Acciaro, M. Sitzia, A. Cabiddu, C. Manca, G. Molle and V. Giovanetti
S2-10	Options available for improved forage production under highland conditions. The Pakistan Experience	M. Dost
S2-11	Locations and some agricultural properties of <i>Medicago orbicularis</i> L. genotypes present in Antalya flora	C. Erdurmuş and S. Çakmakçı
S2-12	Preliminary selection of <i>Lolium perenne</i> L. natural populations for pasture improvement purpose in rainfed Mediterranean conditions	F. Sanna, P. Saba, M. Sassu and A. Franca
S2-13	Morphological characterization within some Algerian populations of <i>Trifolium striatum</i> L. (Fabaceae)	R. Issolah and A. Abdelguerfi
S2-14	Landraces of forage maize as source of genetic variability for organic farming	A.B. Monteagudo, L. Campo, B. Salleres and J. Moreno
S2-15	Characterization of a local germplasm of sulla (<i>Hedysarum coronarium</i>) in the north of Morocco	A. Noutfia, R. Mrabet, N. El Mourabit, M. Ayadi and S. El Othmani
S2-16	Selection of oat varieties to the North of Morocco: Need of diffusion and renewal of the varieties	A. Noutfia, N. El Mourabit and C. Alfaiz
S2-17	The effect of seed size and some priming methods on germination of <i>Vicia sativa</i> L.	O. Onal Asci and Z. Acar
S2-18	Prediction of the nutritive value of annual forage clovers and serradella by near infrared spectroscopy (NIRS)	S. Pereira-Crespo, J. Valladares, G. Flores, B. Fernández-Lorenzo, C. Resch, J. Piñeiro, N. Díaz, A. González-Arráez, M.J. Bande-Castro and X. Rodríguez-Diz
S2-19	New annual legumes as winter crops for intensive forage rotations in Galicia (NW Spain).I – Dry matter yield	J. Valladares, S. Pereira-Crespo, G. Flores, N. Díaz, B. Fernández-Lorenzo, C. Resch, A. González-Arráez, M.J. Bande-Castro, X. Rodríguez-Diz and J. Piñeiro
S2-20	New annual legumes as winter crops for intensive forage rotations in Galicia (NW Spain). II – Nutritive Value	S. Pereira-Crespo, J. Valladares, G. Flores, N. Díaz, B. Fernández-Lorenzo, C. Resch, A. González-Arráez, M.J. Bande-Castro, X. Rodríguez-Diz and J. Piñeiro
S2-21	Searching for new annual legumes suitable for pasture establishment in Southern Europe	G.A. Re, D. Dettori, A. Franca, C. Porqueddu and L. Sulas
S2-22	Drought and high temperature resistance evaluation of <i>Dactylis glomerata</i> L.	M. Salis, A.M. Carroni, M. Pitzalis, L. Sulas and L. Ledda
S2-23	Adaptation of Australian self-reseeding forage legumes to three different environments of Sardinia	L. Salis, M. Sitzia, M. Vargiu, P. Mulè, G.A. Re and L. Sulas
S2-24	The fluoride effect (NaF) on germination and yield production of three local species of Poaceae fodder	S. Slimani, M. Boudelaa, A. Ladjama, I. Nadjeh and M. Benkadour
S2-25	Yield and nitrogen fixation capacity by inoculated white lupin (<i>Lupinus albus</i> L.)	L. Sulas, S. Canu, A.M. Carroni, M. Sassu and M. Salis

Session 3. Role and management of permanent grasslands

S3-01	Evolution of the floristic diversity of an artificial mixture meadow under semi-arid climate in Algeria	K. Abbas and C. Porqueddu
S3-02	Development of agro forestry areas in Northern Algeria to improve pastoral production	A. Abdelguerfi, M. Laouar, K. Abbas, M. M'Hammedi Bouzina and T. Madani
S3-03	Fodder trees and shrubs in range and farming systems in semi arid regions of Tunisia	H. Ammar, M.A. Lahyeni, M. Ben Younes, S. Lopez and R. Lahsoumi
S3-04	Effect of deficit irrigation on dry matter and sheep production from permanent sown pastures	S. Isik, S. Ates, A. Gunes, A.H. Aktas and G. Keles
S3-05	Effects of nitrogen and phosphorus fertilization on dry matter yield and quality of an abandoned rangeland	E. Budakli Carpici, M.M. Tunali and N. Celik
S3-06	Effect of <i>Bacillus</i> sp. on P uptake in <i>Vicia sativa</i> , <i>Vicia ervilia</i> , <i>Medicago sativa</i> grown in greenhouse conditions	C. Cevheri and Ç. Küçük
S3-07	Pasture improvement programs carried out on some coastal pastures and highland ranges of Antalya	M. Çürek, C. Erdurmuş, S. Çeçen, B. Aydinoglu, M.T. Bilgen and S. Çakmakçi
S3-08	Daily growth evaluation of an irrigated lucerne crop	I. Delgado, F. Muñoz and D. Andueza
S3-09	Seasonal change of the mineral concentrations of gall oak (<i>Quercus infectoria</i>) and Christ's-thorn (<i>Paliurus spinachristi</i>)	A. Gökkuş, A. Özasan-Parlak and M. Parlak
S3-10	Evaluation of <i>Rhizobium</i> isolates from <i>Melilotus officinalis</i> nodules at various stress conditions	Ç. Küçük and C. Cevheri
S3-11	Management of common pool resources: Cases of collective grasslands, inventory and characterization of their management in the region of Hadj Mechri, Laghouat (Algeria)	A. Mouhous, S.A. Kadi, R. Hammouda, H. Guermah and F. Djellal
S3-12	Secondary compounds characterization in some autochthonous species from a North-Eastern region of Tunisia	A. Bettaieb, N. Moujahed and R. Ksouri
S3-13	Importance of <i>Kochia prostrata</i> (L.) Schrad in arid and semi arid regions for livestock feeds	R. Acar and A. Özköse
S3-14	Effect of component ratios and management of an annual ryegrass/burr medic mixture on the forage quality	G.A. Re, C. Porqueddu, P. Saba, L. Sulas and A. Franca
S3-15	Forage production of the drought tolerant Mediterranean forage legume teder (<i>Bituminaria bituminosa</i> var. <i>albomarginata</i>) in the medium-rainfall zone of south eastern Australia as affected by plant density and cutting frequency	D. Real and D. Kidd
S3-16	Nutrient and tannin content of browsing shrub legumes informally used for small ruminant feeding in Canary Islands, Spain	M.R. Ventura, D. Bastianelli, P. Hassoun, M.P. Flores, L. Bonnal and E. González-García
S3-17	Sustainability of a beef cattle production system in Mediterranean marginal areas	M. Sitzia, L. Salis, G.M. Marrosu, M. Acciaro and M. Decandia

Session 4. Changes in Mediterranean farming systems to meet new socio-economic scenarios

S4-01	Exploring the use of alternative forage legume crops to enhance organic livestock farming in a context of climate and socio-economic changes	<i>F. López-i-Gelats and J. Bartolomé</i>
S4-02	Alley cropping as a durable alternative for pasture land development in the drought prone region of Eastern Morocco	<i>Y. Chebli, R. Mrabet and M. Chentouf</i>
S4-03	Assessing grazing animal production systems on large Greek islands: A case study on the island of Crete	<i>I. Hadjigeorgiou and G. Zervas</i>
S4-04	Use of front face fluorescence spectroscopy to identify sheep milk from different feeding diets	<i>M. Hammami, R. Karoui, H. Selmi and H. Rouissi</i>
S4-05	The hydrodynamic relationships of two herbaceous species in a grazed <i>Morus alba</i> L. silvopastoral system	<i>P.S. Sklavou, M. Karatassiou, C.N. Tsiouvaras and B. Noitsakis</i>
S4-06	Change in milk composition and fatty acid profile of dairy ewes depending on nature of two annual grasses species in sub-humid region of Tunisia	<i>O. Maâmouri and N. Atti</i>
S4-07	Challenge the roots. Moving toward a sustainable agriculture	<i>P. Mulè, G. Manca and M. Vargiu</i>
S4-08	Current trends in the transhumant sheep and goat sector in Greece	<i>V. Laga, A. Ragkos, V. Skapetas, I. Mitsopoulos, S. Kiritsi, Z. Abas, K. Mazaraki and V. Bambidis</i>
S4-09	Root colonization of hybrid maize cultivars by mycorrhizal and pathogenic fungi at establishment in an acid soil with high phosphorus content	<i>M.J. Sainz, O. Aguin, M.J. Bande, G. Aris, C. Pintos and J.P. Mansilla</i>
S4-10	Irrigated fodder as the pillar of cattle products' supply chains in the South Mediterranean area: present situation and future prospects	<i>GM.T. Sraïri</i>
S4-11	Legume-cereal mixtures ensiling in Sardinia	<i>C. Sulas, P. Ruda, M. Salis, A.S. Atzori, F. Correddu, A. Cannas and A.M. Carroni</i>
S4-12	The quantity and quality of different forage resources (fallow land, grassland and stubble) in the semi arid area of Sétif	<i>N. Tedjari, T. Madani and K. Abbas</i>
S4-13	Enhancement of agro-pastoral productions in the rural community of M'Nahba (Wilaya of Marrakech – Morocco)	<i>M. Lubino, M. Mortaji, C. Porqueddu, M. Sitzia, P.P. Roggero, R. Melis</i>
S4-14	Increasing production and improving quality of lamb's meat through grassland cultivation and rotational management	<i>N. Atti and M. Mahouachi</i>