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FISIOLOGÍA VEGETAL

FV 2017 BARCELONA SPAIN

XXII REUNIÓN DE LA SOCIEDAD ESPAÑOLA DE FISIOLOGÍA VEGETAL | XV SPANISH PORTUGUESE CONGRESS OF PLANT PHYSIOLOGY

LIBRO DE ABSTRACTS

26-29 DE JUNIO DE 2017

BARCELONA SPAIN

2017 FV

ECOPHYSIOLOGY AND CLIMATE CHANGE

ROOM: SALA CAPRI+ MEDES
SESSION: 8

C-0064 THE COMBINATION OF IRRIGATION STRATEGY AND MYCORRHIZAL INOCULATION CAN IMPROVE BERRY QUALITY OF TEMPRANILLO GRAPEVINES IN A CLIMATE CHANGE SCENARIO

Nazareth Torres Molina; Nieves Goicoechea Preboste; M. Carmen Antolín Bellver;

C-0104 WATER AVAILABILITY IN LEAVES OF CITRUS PLANTS DETERMINES THE ABA ACCUMULATION IN ROOTS UNDER WATER STRESS

Matías Manzi, Marta Pitarch-Bielsa,Carlos de Ollas, Damián Balfagón, Vicent Arbona

C-0125 MODULATION OF THE ANTIOXIDANT SYSTEM IS ASSOCIATED TO CITRUS TOLERANCE TO COMBINED CONDITIONS OF ABIOTIC STRESS

Damián Balfagón Sanmartín; Sara Izquierdo Zandalinas; Vicent Arbona Mengual; Carlos de Ollas

C-0225 EXOGENOUS SALICYLIC ACID AS AN OLIVE TREE PHYSIOLOGICAL REGULATOR DURING DROUGHT AND POST-DROUGHT RECOVERY

Cátia Brito; Lia-Tania Dinis; Glória Pinto; Helena Ferreira; Mónica Meijón; Luís Valledor; José Moutinho-Pereira; Carlos Correia;

C-0189 DURATION OF DEVELOPMENTAL PHASES, AND DYNAMICS OF LEAF APPEARANCE AND TILLERING, AS AFFECTED BY SOURCE AND DOSES OF PHOTOPERIOD INSENSITIVITY ALLELES IN WHEAT UNDER FIELD CONDITIONS

Helga Ochagavia Orbegozo; Paula Prieto; Roxana Savin; Simon Griffiths; Gustavo Slafer;

C-0262 ELEVATED AIR HUMIDITY INCREASES UV-MEDIATED DAMAGE IN PISUM SATIVUM DUE TO CHANGES IN EPICUTICULAR WAX AND REDUCED FLAVONOID CONTENT

Sheona Noemi Innes; Sheona Noemi Innes; Louise E. Arve; Line Nybakken; Tone Melby; Boris Zimmerman; Knut Asbjørn Solhaug; Jorunn E. Olsen; Sissel Torre;

C-0305 EFFECT OF ELEVATED INORGANIC CARBON ON THE CYTOSOLIC HOMEOSTASIS OF NITRATE IN THE MARINE ANGIOSPERM POSIDONIA OCEANICA (L.) DELILE.

Lourdes Rubio; Delia García Pérez; José Antonio Fernández García;

C-0315 GAS EXCHANGE AND CHLOROPHYLL FLUORESCENCE OF "GOLDEN DELICIOUS" AND "FUJI" APPLE TREES PROTECTED BY A GREY ANTI-HAIL COVER

Carlos Correia; Ermelinda Silva; Cátia Brito; Luís Pinto; Helena Ferreira; Ana Luzio; Lia Dinis; José Moutinho Pereira; Manuel A. Rodrigues; Alexandre Gonçalves;

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***Carlos Correia*[1]**, *Ermelinda Silva*[1], *Cátia Brito*[1], *Luís Pinto*[1], *Helena Ferreira*[1], *Ana Luzio*[1], *Lia Dinis*[1], *José Moutinho Pereira*[1], *Manuel A. Rodrigues*[2], *Alexandre Gonçalves*[1]

[1]*Universidade de Trás-os-Montes e Alto Douro Vila Real (Trás-os-Montes e Alto Douro) Portugal*
[2]*Instituto Politécnico de Bragança (Trás-os-Montes e Alto Douro) Portugal*

1 Resumen

The frequency and severity of hail events in some apple growing areas of the Iberian Peninsula may increase in the future in the context of climate change. One technological option to minimise potential damages is the use of over-tree netting. Moreover, anti-hail nets can also provide additional benefits by reducing plant stress, sunburn and wind speed. In this work, carried out during 2016, was tested the application of a grey anti-hail net in a commercial orchard with two cultivars (Golden Delicious and Fuji) of apple tree (*Malus domestica* Borkh.). Although it reduced the photosynthetically active radiation, the grey net had no negative effects on the photosynthetic performance of both apple tree cultivars during the summer season. On contrary, the anti-hail net contributed to the improvement of net photosynthetic rate of "Fuji" plants close to harvest, namely during the afternoon period, reducing the degree of photosynthesis depression from the morning to the afternoon. A strictly association was observed between photosynthesis and stomatal conductance, although non-stomatal limitations to photosynthesis, that include changes in effective photochemical quantum yield of PSII and in electron transport rate, also occur in open sky plants. Therefore, the use of a grey anti-hail net on apple orchards appears as an interesting tool for the protection of apple trees against hail ensuring an adequate photosynthetic activity.

Acknowledgements: This work was funded by the project PA 54824 (IF 0034), funded by the European Agricultural Fund for Rural Development and the Portuguese state under the measure 4.1- Cooperation for the Innovation - Rural Development Program (PRODER).