

Grupo AGR123: ECOFISIOLOGÍA Y BIOTECNOLOGÍA DE CULTIVOS Y PLANTAS DE INTERÉS ECOLÓGICO

1. Personal

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2. Líneas de investigación

Marcadores moleculares para la detección de caracteres de resistencia a estreses abióticos.
Definición de criterios morfofisiológicos de selección para la mejora genética de los cereales bajo ambiente mediterráneo. Ecofisiología de especies de valor ecológico en Andalucía.
Evaluación de productos agroalimentarios mediante reflectancia espectral.

3. Publicaciones

Moragues, M.; García del Moral, L.F.; Moralejo, M. and Royo, C. 2006. Yield formation strategies of durum wheat landraces with distinct pattern of dispersal within the Mediterranean basin I: Yield components. *Field Crops Research* 95: 194-205.

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Alvaro, F., García del Moral, L.F. and Royo C. 2007. Usefulness of remote sensing for the assessment of growth traits in individual cereal plants grown in the field. *International Journal of Remote Sensing*. 28 : 2497-2512.

Villegas, D.; García del Moral, L.F ; Rharrabti, Y; Martos, V.; Royo, C..2007. Morphological traits above the flag leaf node as indicators of drought susceptibility index in durum wheat. *Journal of Agronomy and Crop Science* 193: 103-116.

Royo, C.; Alvaro, F.; Martos, V.; Ramdani, A.; Isidro, J.; Villegas, D.; García del Moral, L.F. 2007. Genetic changes in durum wheat yield components and associated traits in Italian and Spanish varieties during the 20th century. *Euphytica* 155: 259-270.

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- Alvaro, F.; Isidro, J.; Villegas, D.; García del Moral, L.F.; Royo, C. 2008. Old and modern durum wheat varieties from Italy and Spain differ in main spike components. *Field Crops Res.* 106: 86-93.
- Maccaferri, M. et al., 2008. Quantitative Trait Loci for grain yield and adaptation of durum wheat (*Triticum durum* Desf.) across a wide range of water availability. *Genetics* 178: 489–511.
- Royo, C., Martos, V., Ramdani, A., Villegas, D., Rharrabti, Y., García del Moral, L.F. 2008. Changes in Yield and Carbon Isotope Discrimination of Italian and Spanish Durum Wheat during the 20th Century. *Agronomy Journal* 100: 352-360.
- Alvaro, F.; Isidro, J.; Garcia del Moral, L.F., Villegas, D.; Royo, C. 2008. Breeding Effects on Grain Filling, Biomass Partitioning, and Remobilization in Mediterranean Durum Wheat. *Agronomy Journal* 100:361-370.
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- Garcia del Moral, F.; Guillén, A.; Garcia del Moral, L.F.; O´Valle, F.; Martínez, L.; Garcia del Moral, R. 2009. Duroc and Iberian Pork Neural Network Classification by Visible and Near Infrared Reflectance Spectroscopy. *Journal of Food Engineering* 90: 540-547.
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4. TESIS DOCTORALES DEFENDIDAS

Fanny Álvaro Sánchez.: «Contribución al desarrollo de nuevas estrategias y herramientas de selección para la mejora del trigo duro en ambiente mediterráneo: estudio del efecto de la mejora genética llevada a cabo en Italia y España sobre la formación del rendimiento». Universidad de Lérida, Facultad de Biología. Noviembre 2007. Sobresaliente cum laude por unanimidad.

Julio Isidro Sánchez.: «Análisis ecofisiológico y molecular del impacto de la mejora genética del trigo duro en ambiente mediterráneo sobre la formación del rendimiento y la acumulación de aminoácidos y proteínas» Universidad de Granada, Facultad de Ciencias. Junio-2008. Sobresaliente cum laude por unanimidad.

María Elena Flor Peregrín.: «Uso de agentes de control y protección biológica frente a nemátodos del género *Meloidogyne* en cultivos protegidos bajo plástico» Universidad de Granada, Facultad de Ciencias. Febrero-2013. Sobresaliente cum laude.

5. FINANCIACIÓN

«Un nuevo laboratorio de Ecofisiología vegetal para la Universidad de Jordania». AECID Ministerio de asuntos exteriores y cooperación al desarrollo 2013. Referencia: A1/036601/11. Investigadora principal: Dra. Vanessa M. Martos Núñez 148.129 euros.

«Espectrorradiómetro UV-VIS-NIR de aplicación en producción vegetal, agroalimentación y materiales patrimoniales». Ayudas a Infraestructura y Equipamiento Científico 2015. MINECO, Referencia: UNGR 15-CE 3531. Investigador principal: Dr. Luis F. García del Moral Garrido. 103.530 euros.

«Nuevos procesos biotecnológicos de preparación de inoculantes de microorganismos, del suelo. Tecnologías basadas en fuentes renovables de fosfatos y residuos, agroindustriales». Plan Nacional I+D, Ministerio de Ciencia y Tecnología. 2012-2015. Referencia: CTM2011-27797. Investigador principal: Dr. Dr. Nikolay Vassilev 125.000 euros.

«Aplicaciones Biotecnológicas en la Producción y Formulación de una nueva clase de Bio-fertilizantes» Plan Nacional I+D, Ministerio de Ciencia y Tecnología. 2015-2018. Referencia: CTM2014-53186-R. Investigador principal: Dr. Dr. Nikolay Vassilev 120.000 euros.