

Curriculum Vitae

Personal Data.

Name: Jose A.

Surname: Hernandez Cortes.

Nationality: Spanish

Dpto: Group of Fruit Biotechnology Dept. Fruit Breeding

Institution: CEBAS-CSIC

Position: Senior Researcher from the CSIC.

Address: Campus Espinardo, Murcia (Spain)

P.O. Box 164, Code: 30100

Telph. Number: 34-69-396319

Fax number: 34-68-396213

Email: jahernan@cebas.csic.es

Professional Societies.

Member of the Spanish Society of Plant Physiology.

Research Topics: (domain Plant Physiology and Biochemistry)

-Antioxidative metabolism in plants under environmental stress conditions

-Physiological and biochemical responses of *Prunus* species to Plum pox virus infection

- ROS signalling during germination and plant growth

SCI Publications.

CORPAS, F.J.; SANDALIO, L.M.; PALMA, J.M.; LEIDI, E.O.; **HERNANDEZ, J.A.**; SEVILLA, F. and DEL RIO, L.A. (1991). Subcellular distribution of superoxide dismutase in leaves of ureide-producing leguminous plants, *Physiol. Plant.*, **82**: 285-291.

CORPAS, F.J.; GOMEZ, M.; **HERNANDEZ, J.A.** and DEL RIO, L.A. (1992) Metabolism of activated oxygen in leaf peroxisomes from two *Pisum sativum* L. cultivars with different sensitivity to sodium chloride. *J. Plant Physiol.*, 141: 160-165.

HERNANDEZ, J.A.; CORPAS, F.J.; GOMEZ, M.; DEL RIO, L.A. and SEVILLA, F. (1993). Salt-induced oxidative stress mediated by activated oxygen species in pea leaf mitochondria. *Physiol Plant.* 89:103-110.

HERNANDEZ J.A.; ALMANSA M.S.; DEL RIO L.A. AND SEVILLA F. 1993. Effect of salinity on metalloenzymes of oxygen metabolism in two leguminous plants. *J. Plant Nutrition*, 16:2539-2554.

HERNANDEZ, J.A.; DEL RIO, L.A. and SEVILLA, F. (1994). Salt stress-induced changes in superoxide dismutase isozymes in leaves and mesophyll protoplasts from *Vigna unguiculata* (L.) Walp. *New Phytol.*, 126:37-44.

OLMOS E.; **HERNANDEZ J.A.**; SEVILLA F. and HELLIN E. (1994) Induction of several antioxidant enzymes in the selection of a salt-tolerant cell line of *Pisum sativum*. *J. Plant Physiol.*, 114:594-598.

- HERNANDEZ, J.A.**; OLMOS E.; CORPAS, F.J.; SEVILLA F. and DEL RIO L.A. (1995). Salt-induced oxidative stress in chloroplasts of pea plants. *Plant Sci.*, 105:151-167.
- PIQUERAS A., **HERNANDEZ J. A.**, OLMOS E.; HELLIN E. AND SEVILLA F. (1996) Changes in antioxidant enzymes associated with adaptation of *Citrus* cells to salt stress. *Plant Cell, Tissue and Organ Culture* 45:53-60.
- JIMENEZ A, **HERNANDEZ JA**, PASTORI GM, DEL RIO LA AND SEVILLA F (1996) Active oxygen metabolism in the senescence of pea leaves: ascorbate and glutathione contents in different cell compartments. *Biochem. Soc. Trans.*, 24: 198
- LASSERRE, E., BOUQUIN, T ,**HERNANDEZ J.A.**, BULL, J., PECH, J.C. and BALAGE, C. (1996). Characterization of three genes encoding ACC oxidase from melon (*Cucumis melo* L.). *Mol. Gen. Genet.*, 251:81-90.
- JIMENEZ A, **HERNANDEZ JA**, DEL RIO LA AND SEVILLA F (1997) Evidence for the presence of the ascorbate-glutathione cycle in mitochondria and peroxisomes of pea (*Pisum sativum* L.) leaves *Plant Physiol*, 114:275-284.
- JIMENEZ A, **HERNANDEZ JA**, DEL RIO LA AND SEVILLA F. (1997). Ascorbate-glutathione cycle in mitochondria and peroxisomes of pea leaves: changes induced by leaf senescence. *Phyton* 37:101-108.
- LASSERRE E.,GODAR F, BOUQUIN T., **HERNANDEZ J.A.**, PECH J.C. ROBY D and BALAGE C. (1997) Regulation of two melon ACC oxidase gene promoters during plant development and in response to biotic and abiotic stress. *Mol. Gen. Genet.* 256:211-222.
- DEL RIO LA, PASTORI GM, PALMA JM, SANDALIO LM, SEVILLA F, CORPAS FJ, JIMENEZ A, LOPEZ-HUERTAS E, and **HERNANDEZ JA** .(1998) The activated oxygen role of peroxisomes in senescence. *Plant Physiol* , 116:1195-1200.
- JIMENEZ A, **HERNANDEZ JA**, PASTORI GM, DEL RIO LA AND SEVILLA F (1998) On the role of the ascorbate-glutathione cycle of mitochondria and peroxisomes in the senescence of pea leaves. *Plant Physiol*. 118: 1327-1335.
- JIMENEZ A, **HERNANDEZ JA**, ROS BARCELO A, SANDALIO LM, DEL RIO LA AND SEVILLA F. (1998) Characterization of mitochondrial and peroxisomal ascorbate peroxidase of pea leaves. *Physiol Plant.*, 104:687-692
- HERNÁNDEZ JA**, CAMPILLO, A., JIMÉNEZ A. ALARCON JJ and SEVILLA F. (1999) Effect of salt stress on the antioxidant systems from pea plants. *New Phytol* 141: 241-251.
- GÓMEZ JM, **HERNÁNDEZ JA**, JIMÉNEZ A, DEL RÍO LA and SEVILLA F. (1999) Differential response of antioxidative enzymes of chloroplasts and mitochondria to long-term NaCl stress of pea plants. *Free Rad. Res.* **31**(suppl.), 11-18.
- HERNANDEZ JA**, JIMENEZ A, MULLINEAUX PM AND SEVILLA F (2000) Tolerance of pea (*pisum sativum* l.) to long-term salt stress is associated with induction of antioxidant defences. *Plant Cell Environm* 23:853-862.

- HERNANDEZ JA**, TALAVERA JM, MARTINEZ-GOMEZ P, DICENTA F AND SEVILLA F (2001). Response of antioxidative enzymes of apricot plants to Plum Pox Potyvirus. **Physiol Plant** 111: 313-321
- HERNANDEZ JA**, FERRER MA, JIMENEZ A, ROS-BARCELÓ A. and SEVILLA F (2001) Antioxidant systems and O_2^-/H_2O_2 production in the apoplast of *Pisum sativum* L. leaves: its relation with NaCl-induced necrotic lesions in minor veins **Plant Physiol** 127: 817-823.
- ALMANSA MS, **HERNANDEZ JA**, JIMENEZ A., BOTELLA MA AND SEVILLA F. (2002) Influences of rootstock-scion combinations in the superoxide dismutase response to salt in *Citrus* trees **Biol. Plant.** 45: 545-549
- HERNANDEZ JA** and ALMANSA MS (2002) Short-term effects of salt stress on antioxidant systems and leaf water relations of pea plants. **Physiol Plant** 115: 251-257.
- ALGUACIL MM, **HERNANDEZ JA**, F CARAVACA PORTILLO B and ROLDÁN A (2003) Antioxidant enzyme activities in shoots from three mycorrhizal shrub species afforested in a degraded semiarid soil **Physiol Plant** 118: 562-570.
- TUDELA JA, **HERNÁNDEZ JA**, GIL MI and ESPÍN JC (2003) L-galactono- γ -lactone dehydrogenase in mitochondria from fresh cut potatoes stored under different conditions: effects on ascorbic acid synthesis. **J. Agr. Food Chem.** 51: 4296-4302
- PARRAGA P., **HERNÁNDEZ JA**, ARGÜELLES JC (2003) Induction of antioxidant enzymatic defenses against severe oxidative stress (H_2O_2) in *Candida albicans*. **Yeast** 20:1161-1169.
- HERNÁNDEZ JA**, AGUILAR A, PORTILLO B; LÓPEZ-GÓMEZ E, MATAIX BENEYTO J., GARCÍA-LEGAZ MF (2003). The effect of calcium on the antioxidant enzymes from salt-treated loquat and anger plants. **Functional Plant Biology** 30: 1127-1137
- HERNÁNDEZ J. A.**; RUBIO M., PORTILLO B., DICENTA F., AND MARTÍNEZ-GÓMEZ P. (2003) Response of antioxidant enzymes from peach (*Prunus persica* l. cv GF305) to Plum Pox virus infection. **Free Radical Research**, 37(S2):14.
- HERNANDEZ JA**, ESCOBAR C, CREISSEN G and MULLINEAUX P. (2004) Role of hydrogen peroxide and the redox state of ascorbate in the induction of antioxidant enzymes in pea leaves under excess light stress. **Functional Plant Biology** 31: 359-368
- BLAZQUEZ S, OLMOS E, **HERNÁNDEZ JA**, HELLÍN E, FERNÁNDEZ JA AND PIQUERAS A (2004). Somatic embryogenesis in saffron (*Crocus sativus* L.):

morphological differentiation and the role of the antioxidant enzymatic system. *Acta Horticulturae* 650:261-267

- HERNANDEZ JA**, DIAZ-VIVANCOS P, RUBIO M, DICENTA F, AND MARTÍNEZ-GÓMEZ P (2004). Oxidative stress induced by a long-term PPV infection in apricot. *Acta Physiol Plant* 26:125-126
- HERNÁNDEZ JA**; RUBIO M, OLMOS E, ROS-BARCELÓ A, MARTÍNEZ-GÓMEZ P (2004) Oxidative stress induced by long-term Plum pox virus infection in Peach (*Prunus persica* L. cv GF305). *Physiol Plant*. 122: 486-495.
- ELKAHOUI S., HERNÁNDEZ JA, ABDELLY C, GRHIR R., LIMAM F. (2005)** Changes induced by NaCl in lipid peroxidation, lipoxygenase and antioxidant enzyme activities of *Catharanthus roseus* suspension cells. *Plant Sci* 168: 607-613.
- PARRAGA P., MARIN FR, ARGÜELLES JC and **HERNÁNDEZ JA** (2005) Changes in glutathione content during germ tubes formation induced by human serum in *Candida albicans*. *Biochem. Biophys Acta-General Subjects* 1722: 324-330.
- CARAVACA F., ALGUACIL M.M., **HERNÁNDEZ J.A.** AND ROLDÁN A. (2005) Involvement of antioxidant enzyme and nitrate reductase activities during water stress and recovery of mycorrhizal *Myrtus communis* and *Phillyrea angustifolia* plants. *Plant Sci* 169:191-197.
- HERNÁNDEZ J.A., DÍAZ-VIVANCOS P., RUBIO M., OLMOS E., ROS-BARCELÓ AND MARTÍNEZ-GÓMEZ P** (2006) Long-term PPV infection produces an oxidative stress in a susceptible apricot cultivar but not in a resistant cultivar. *Physiol Plant*. 126:140-152
- ROS-BARCELÓ A, GÓMEZ-ROS L.V., FERRER MA AND **HERNÁNDEZ JA** (2006) The apoplastic antioxidant enzymatic system in the wood-forming tissues of trees. *Trees-Structure and Function*, 20: 145-156
- PEDREÑO Y., GONZÁLEZ-PÁRRAGA P., CONESA S., MARTÍNEZ-ESPARZA M., AGUINAGA A., HERNÁNDEZ J.A. AND ARGÜELLES J.C. (2006)* The cellular resistance against oxidative stress (H₂O₂) is independent of neutral trehalase (*Ntc1p*) activity in *Candida albicans*. *FEMS Yeast Res.* 6: 57-62.
- HERNANDEZ JA**, CANO J, PORTILLO B, RUBIO M, MARTÍNEZ-GÓMEZ P. (2006) Antioxidant enzymes as biochemical markers for sharka resistance in apricot. *Biol Plant*. 50: 395-399.
- HERNANDEZ JA**, ESCOBAR C, CREISSEN G and MULLINEAUX P. (2006) Antioxidant enzymes induction in pea plants under excess light stress. *Biol. Plant*. 50: 400-404.
- ALGUACIL M.M., CARAVACA, F., DIAZ-VIVANCOS P., **HERNANDEZ** , J.A. and **ROLDÁN A.** (2006) Effect of arbuscular mycorrhizas and induced drought stress on antioxidant enzyme and nitrate reductase activities in *Juniperus oxycedrus* L. growing in a desertified soil amended with composted sewage sludge. *Plant and Soil*. 279:209-218.
- LÓPEZ-GÓMEZ E, SANJUÁN MA, DIAZ-VIVANCOS P., MATAIX BENEYTO J., GARCÍA-LEGAZ MF, **HERNÁNDEZ JA** (2007) Effect of salinity and rootstocks on antioxidant systems of loquat plants (*Eriobotrya japonica* Lindl.): Response to supplementary boron addition. *Environ. Exp. Bot.* 160:151-158.
- LV. GÓMEZ ROS, G.J. AZNAR-ASENSIO, **JOSE A. HERNÁNDEZ**, MARIA A. BERNAL., M.J.L. NÚÑEZ-FLORES, JUAN CUELLO, AND A. ROS BARCELÓ

- (2007) Structural motifs of syringyl peroxidases are conserved during angiosperm evolution. *J. Agric. Food Chem.* 55: 4131-4138.
- AMARI K, DIAZ-VIVANCOS P, SÁNCHEZ-PINA MA AND **HERNÁNDEZ J.A.** (2007) Response of antioxidant enzymes from apricot embryos to *Prunus necrotic ringspot virus* (PNRSV). *Physiol Plant.* 131:302-310.
- ROLDÁN A., DÍAZ-VIVANCOS P., **HERNÁNDEZ J.A.**, CARRASCO L. AND CARAVACA F. (2008) Superoxide dismutase and total peroxidase activities related to drought-recovery performance of mycorrhizal shrub seedlings grown in an amended semiarid soil. *Journal of Plant Physiol.* 165:715-722 Doi: 10.1016/j.jplph.2007.02.007. **Índice Impacto: 2.500. 1er Q Plant Sciences (28/156)**
- JOSEF KOHLER, **JOSÉ ANTONIO HERNÁNDEZ**, FUENSANTA CARAVACA AND ANTONIO ROLDÁN (2008) PGPR and AM fungi modify alleviation biochemical mechanisms in water stressed plants. *Functional Plant Biology* 35: 141-151.
- DIAZ-VIVANCOS, P., CLEMENTE-MORENO MJ., RUBIO M, OLMOS E, GARCIA JA, MARTÍNEZ-GÓMEZ, P. and **HERNÁNDEZ, J.A.** (2008) Alteration in the chloroplastic metabolism leads to ROS accumulation in pea plants in response to *Plum pox virus*. *Journal of Experimental Botany* 59: 2147-2160. doi:10.1093/jxb/ern082.
- JOSEF KOHLER, **JOSÉ ANTONIO HERNÁNDEZ**, FUENSANTA CARAVACA AND ANTONIO ROLDÁN (2009) Induction of antioxidant enzymes is involved in the greater effectiveness of a PGPR versus AM fungi with respect to increasing the tolerance of lettuce to severe salt stress. *Environ. Exp. Bot.* 65:245-252.
- BLÁZQUEZ S, OLMOS E, **HERNÁNDEZ JA**, FERNÁNDEZ JA AND PIQUERAS A (2009) Somatic embryogenesis in saffron (*Crocus sativus L.*). Histological differentiation and the role of the antioxidant enzymatic system. *Plant Cell, Tissue and Organ Culture* 97: 49-57.
- ZEINALABEDINI M, MAJOURHAT K., KHAYAM-NEKOU, **HERNÁNDEZ J.A.** AND MARTÍNEZ-GÓMEZ P. (2009) Breaking seed dormancy in long-term stored seeds from Iranian wild almond species. *Seed Science and Technology* 37:267-275.
- NOVO UZAL E, GÓMEZ-ROS LV , **HERNÁNDEZ JA**, PEDREÑO MA, CUELLO J, AND ROS BARCELÓ A(2009) Proteomic analysis of the cell wall of gymnosperms. *J. Plant Physiol.* 166: 831-843. doi:10.1016/j.jplph.2008.11.009.
- CLEMENTE-MORENO MJ; DIAZ-VIVANCOS, P; BARBA-ESPIN G, **HERNÁNDEZ JA** (2010) Benzothiadiazole and L-2-oxothiazolidine-4-carboxylic acid reduced the severity of Sharka symptoms in pea leaves: effect on the antioxidative metabolism at subcellular level. *Plant Biology* 12: 88-97. DOI: 10.1111/j.1438-8677.2009.00204.x.
- DIAZ-VIVANCOS, P; BARBA-ESPIN G, CLEMENTE-MORENO MJ, **HERNÁNDEZ JA** (2010) Characterization of the antioxidative system during the vegetative development of pea plants. *Biol. Plant* 54:76-82
- BARBA-ESPIN G., DIAZ-VIVANCOS P., CLEMENTE-MORENO MJ., ALBACETE A., FAIZE L., FAIZE M., PÉREZ-ALFOCEA F, **HERNÁNDEZ J.A.** (2010) Interplay between hydrogen peroxide and plant hormones during germination and the early growth of pea seedlings. *Plant Cell Environm* 33: 981-994. DOI: 10.1111/j.1365-3040.2010.02120.x.
- ORTIGOSA SM, DIAZ-VIVANCOS, P, CLEMENTE-MORENO MJ, VERAMENDI J, CARVAJAL P, SANTOS M, **HERNANDEZ JA** and TORNÉ JM, (2010) Oxidative stress induced in tobacco leaves by over-expression of maize plastidial

- transglutamisase in chloroplasts: effect on antioxidative metabolism. *Planta* 593: 593-605. DOI 10.1007/s00425-010-1185-y.
- GARCÍA-IBARRA, A., CLEMENTE-MORENO, M.J., BARBA-ESPÍN, G. DÍAZ-VIVANCOS, P., RUBIO, M., DICENTA, F., MARTÍNEZ-GÓMEZ, P., **HERNÁNDEZ, J.A.** (2011) Changes in the antioxidative metabolism induced by Apple chlorotic leaf spot virus infection in peach (*Prunus persica* L.). *Environm Exp Bot.* 70:277-282 (DOI:10.1016/j.envexpbot.2010.10.004).
- M.FAIZE, L. BURGOS, L. FAIZE, A. PIQUERAS, E. NICOLAS, G. BARBA-ESPIN, M.J. CLEMENTE-MORENO, R. ALCOBENDAS, T. ARTLIP AND **J.A. HERNANDEZ** (2010) Involvement of cytosolic ascorbate peroxidase and Cu,Zn-superoxide dismutase for improved tolerance against drought stress. **J. Exp. Bot.** 62:2599-2613 (doi: 10.1093/jxb/erq432).
- DIAZ-VIVANCOS P, MAJOURHAT K, HERNÁNDEZ JA, PIQUERAS A (2010) Antioxidative property of cytokinins during *in vitro* development of saffron bulblets. *Plant Growth Regulation* (in press, doi: 10.1007/s10725-011-9581-2).
- GREGORIO BARBA-ESPÍN, MARIA JOSÉ CLEMENTE-MORENO, SARA ÁLVAREZ, MANUEL FRANCISCO GARCÍA-LEGAZ, **JOSÉ ANTONIO HERNÁNDEZ**, PEDRO DÍAZ-VIVANCOS (2011) Salicylic acid negatively affects the response to salt stress in pea plants. *Plant Biology* (doi: **10.1111/j.1438-8677.2011.00461.x**)
- Gregorio Barba-Espín, Pedro Diaz-Vivancos, Dominique Job, Maya Belghazi, Claudette Job, and **José Antonio Hernández** (2011) Understanding the Role of H₂O₂ During Pea Seed Germination: A Combined Proteomic and Hormone Profiling Approach. **Plant Cell Environm** (Accepted).
- CLEMENTE-MORENO MJ, PIQUERAS A, **HERNANDEZ JA** (2011) Maintenance of Sharka virus PPV (*Plum Pox Virus*) in micropropagated GF305 peach plants: Implication of peroxidase activity in development. **Plant Cell, Tissue and Organ Culture** **45**, 53-60.
- M. Faize , L. Burgos, L. Faize, C. Petri, G. Barba-Espin, P. Díaz-Vivancos, MJ. Clemente-Moreno, N. Alburquerque and **JA. Hernandez** (2011) Modulation of tobacco bacterial disease resistance using cytosolic ascorbate peroxidase and Cu, Zn-superoxide dismutase. *Plant Pathology* (under revision)

H index: 23

Abstracts

- HERNANDEZ, J.A.; TOMAS-BARBERAN, F.; DEL RIO, L.A. and SEVILLA, F. Actividad superóxido dismutasa en protoplastos purificados de hojas de *Vigna unguiculata* L. VIIIth National Meeting of the SEFV. I Spanish-Portugese Congress of Plant Physiology. Barcelona, Spain.
- HERNANDEZ, J.A.; ALMANSA, M.S. and SEVILLA, F. (1989) Efecto del tratamiento salino sobre la actividad de metaloenzimas del metabolismo del oxígeno en plantas de *Phaseolus vulgaris* L. XVIth National Congress of Spanish Biochemistry Society, Alicante, Spain.

- PIQUERAS, A.; HERNANDEZ, J.A.; HELLIN, E. and SEVILLA, F. (1990) Superoxide dismutase changes associated with adaptation of plant cells to salt stress. 7th Congress of the Federation of European Societies of Plant Physiology. Umea, Sweden, August.
- HERNANDEZ, J.A.; ALMANSA, M.S.; DEL RIO, L.A. and SEVILLA, F. (1990) Efecto del estrés salino sobre la actividad superóxido dismutasa en hojas y protoplastos de mesófilo de *Vigna unguiculata* L. III National Symposium of Mineral Nutrition of Plants. Palma de Mallorca, Spain.
- ALMANSA, M.S.; DEL RIO, L.A.; HERNANDEZ, J.A. and SEVILLA, F. (1991) Aislamiento y caracterización de las ferro-superóxido dismutasas de *Citrus limonum* L. II Internacional Meeting in Free Radicals in Biology and Health. Madrid, Spain.
- DEL RIO, L.A.; SEVILLA, F.; SANDALIO, L.M.; PALMA, J.M.; BUENO, P.; CORPAS, F.J.; ALMANSA, M.S. and HERNANDEZ, J.A. (1991) Radicales libres de oxígeno y superóxido dismutasas en células vegetales. II Internacional Meeting in Free Radicals in Biology and Health. Madrid, Spain.
- HERNANDEZ, J.A.; DEL RIO, L.A.; JIMENEZ, A. and SEVILLA, F. (1991) Inducción por CINA de actividades enzimáticas antioxidantes en cloroplastos de guisante. XIth National Meeting of the SEFV. II Spanish-Portuguese Congress of Plant Physiology. Madrid, Spain.
- HERNANDEZ, J.A.; CORPAS, F.J.; GOMEZ, M.; DEL RIO, L.A. and SEVILLA, F. Effect of NaCl on activated oxygen metabolism in mitochondria of *Pisum sativum* L. IV Portuguese-Spanish Biochemistry Congress. Póvoa de Varzim, Portugal, 1991. (C. Poster).
- JIMENEZ, A.; HERNANDEZ, J.A. and SEVILLA, F. (1992) Efecto del suministro de putrescina sobre la actividad superóxido dismutasa en plantas de *Pisum sativum* L. III Plant Growth Regulators Metabolism and Activity Symposium. Murcia, Spain.
- HERNANDEZ, J.A.; ALMANSA, M.S.; DEL RIO, L.A. and SEVILLA, F. (1992) Efecto del CINA sobre metaloenzimas relacionados con el metabolismo del oxígeno en plantas de *Phaseolus vulgaris* L. IV National Symposium of Mineral Nutrition of Plants. Alicante, Spain.
- HERNANDEZ, J.A.; CORPAS, F.J.; DEL RIO, L.A. and SEVILLA, F. Salt-induced oxidative stress in cellular component of *Pisum sativum* L. VII PAABS Congress. Ixtapa. Mexico, 1992 (C. Poster).
- HERNANDEZ, J.A.; CORPAS, F.J.; GOMEZ, M.; SEVILLA, F. and DEL RIO, L.A. (1993). Salt-induced oxidative stress in cell compartment of *Pisum sativum* L. plants. Oxygen and Environmental Stress in Plants. 1st International Conference Held under the auspices of the Society for Free Radical Research. University of St Andrews. 6-10 September 1993 (**Invited work**)
- JIMENEZ, A.M.; HERNANDEZ, J.A.; DEL RIO, L.A. y SEVILLA, F. Actividades antioxidantes en mitocondrias de hojas senescentes de *Pisum sativum* L. III Reunión Nacional del Grupo Español de Radicales Libres. International Meeting on Free Radicals and Antioxidants in Physical Exercise. Valencia, 1993 (C. Poster)

- HELLIN, E; HERNANDEZ, JA; PIQUERAS, A; OLMOS, E and SEVILLA, F. (1993). Influence of the iron content on superoxide dismutase activity and chloroplasts ultrastructure of *Citrus limon* L. 7th International Symposium of Iron Nutrition and Interaction in Plants. Zaragoza, 1993. (C. Poster).
- JIMENEZ, A; HERNANDEZ, J.A.; DEL RIO, L.A. y SEVILLA, F. (1993) Modificaciones en las actividades antioxidantes de mitocondrias de hojas de *Pisum sativum* L. durante la senescencia inducida. Xth National Meeting of the SEFV. III Spanish-Portuguese Congress of Plant Physiology. Pamplona, 1993. (C. Poster)
- LASSERRE E., ROBY D., HERNANDEZ J.A., BOUQUIN T., PECH J.C. and BALAGUE C. (1994) Functional analysis of ACC oxidase genes of melon (*Cucumis melo* L) during plant development and in response to environmental stress. Fourth International Congress on Plant Molecular Biology, Amsterdam, The Netherlands (C. Poster).
- E. LASSERRE, **J.A. HERNANDEZ**, T. BOUQUIN, J.C. PECH AND C. BALAGUE. Structural and functional analysis of ACC oxidase genes from melon (*Cucumis melo* L.). Second General Colloquium on Plant Sciences. Societé Française de Physiologie Végétale. 12-14 Octobre, Sant-Malo, Francia (1994). .
- J.C. PECH, C. BALAGUE, C. ROMBALDI, E. LASSERRE, T. BOUQUIN, E. DUPILLE, R. AYUB, M. GUI S, H. ZEGZOUTI, **J. HERNANDEZ**, M. BOUZAYEN AND A. LATCHE. (1994). Cellular and Molecular aspect of ethylene biosynthesis. Second General Colloquium on Plant Sciences. Societé Française de Physiologie Végétale. 12-14 Octobre, Sant-Malo, Francia (1994). Invited Conference.
- OLMOS, E., **HERNANDEZ, J.A.**, JIMENEZ, A., HELLIN, E. AND SEVILLA, F. Changes in activated oxygen related enzymes in a salt-tolerant cell line of pea. Vth Spanish-Portuguese Congress of Biochemistry, Salamanca (1994). C. Poster
- JIMENEZ, A., **HERNANDEZ, J.A.**, DEL RIO, L.A. AND SEVILLA, F. Study of the implication of mitochondria in the mechanism of leaf induced senescence. Vth Spanish-Portuguese Congress of Biochemistry, Salamanca (1994).
- LASSERRE, E.; BOUQUIN T.; **HERNANDEZ J.A.**; CONFIANT M.; ROBY D; PECH J.C. and BALAGUE C. (1995) Isolement, caractérisation et expression différentielle des gènes codant pour l'ACC oxydase chez le melon (*Cucumis melo* L.). IV^{ème} Forum des Jeunes Chercheurs de la Societé Française de Physiologie Végétale, Clermont-Ferrand. (Oral Communication)
- BOUQUIN T.; LASSERRE, E.; **HERNANDEZ J.A.**; CONFIANT M.; PECH J.C. and BALAGUE C. (1995). Mise en évidence d'une région cis-régulatrice impliquée dans la réponse á l'éthylène d'un gène codant pour l'ACC oxydase chez le melon. IV^{ème} Forum des Jeunes Chercheurs de la Societé Française de Physiologie Végétale, Clermont-Ferrand.
- JIMENEZ, A., PASTORI, G., **HERNANDEZ, J.A.**, DEL RIO, L.A. and SEVILLA, F.(1995). Distribución subcelular y cambios inducidos por la senescencia en los componentes del ciclo ascorbato-glutation en hojas de *Pisum sativum*. XI Reunión Nacional de la SEFV. IV Congresso Luso-Espanhol de Fisiologia Vegetal, Estoril.
- PECH, JC, LASSERRE, E., AYUB, R, GUI S, BIDONDE, S, **HERNANDEZ JA**, RAMASSAMY S, ROMBALDI C, BOUZAYEN M, BALAGUE C AND LATCHE A.

- (1995) Involvement of ethylene in fruit ripening, expression and control of acc oxidase gene. Australasian Postharvest Horticulture Conference.
- JIMENEZ, A., **HERNANDEZ, J.A.**, PASTORI, G., DEL RIO, L.A. and SEVILLA, F.(1995). Active oxygen metabolism in the senescence of pea leaves: ascorbate and glutathione contents in different cell compartments. Second International Conference Held under the auspices of the Society for Free Radical Research. Aberdeen (Scotland).
- DEL RIO LA, PASTORI GM, PALMA JM, SANDALIO LM, SEVILLA F, CORPAS FJ, JIMENEZ A, LOPEZ-HUERTAS E, **HERNANDEZ JA** and DISTEFANO S. (1996) VIII Biennial Meeting International Society for Free Radical Research. Barcelona, **(Invited Work)**.
- HERNANDEZ J.A.**, JIMENEZ A., MULLINEAUX P.M. and SEVILLA F. (1996). Expression of Mn-superoxide dismutase and activity of the Ascorbate-Glutathione cycle enzymes in response to salt- stress in pea plants. VIII Biennial Meeting International Society for Free Radical Research. Barcelona, 1996.
- JIMENEZ A., **HERNANDEZ J.A.**, DEL RIO L.A. and SEVILLA F. (1996). Intraorganellar distribution of the ascorbate-glutathione cycle enzymes in mitochondria and peroxisomes of pea leaves. VIII Biennial Meeting International Society for Free Radical Research. Barcelona, 1996.
- JIMENEZ A., **HERNANDEZ J.A.**, DEL RIO L.A. and SEVILLA F. (1996) Ascorbate-glutathione cycle in mitochondria and peroxisomes of pea leaves: changes induced by leaf senescence. 1st International Conference Held under the auspices of the Society for Free Radical Research, Viena. 10-13 September **(Selected Oral Communication)**.
- HERNANDEZ JA, JIMENEZ A, MULLINEAUX PM, KARPINSKI S AND SEVILLA F (1997). Sistemas antioxidantes y estres salino: estudio en dos cultivares de guisante con diferente sensibilidad al NaCl. XII Reunión Nacional de la SEFV. V Congreso Hispano-Luso de Fisiología Vegetal. Cordoba, 1997. **(Selected Oral Communication)**
- JIMENEZ, A., PASTORI, G., **HERNANDEZ, J.A.**, DEL RIO, L.A. and SEVILLA, F (1997) Cambios inducidos por la senescencia en los componentes del ciclo ascorbato-glutathione en plantas de guisante XII Reunión Nacional de la SEFV. V Congreso Hispano-Luso de Fisiología Vegetal. Cordoba, 1997.
- JIMENEZ A., **HERNANDEZ J.A.**, SANDALIO LM, ROS A, DEL RIO L.A. and SEVILLA F. (1997) Preliminary characterization of mitochondrial and peroxisomal Ascorbate peroxidase isozymes in pea leaves. 3st International Conference Held under the auspices of the Society for Free Radical Research. Pisa (Italia)
- HERNÁNDEZ JA**, GÓMEZ JM, JIMÉNEZ A and SEVILLA F. (1998). Efect of NaCl stress in the response of the antioxidant capacity of apoplast of pea leaves. Winter Meeting 1998 of the Society for Free Radical Research. Oxygen, free radicals and oxidative stress in plants. Granada, 17-19 December.
- SEVILLA, F., **HERNÁNDEZ, J.A.**, GÓMEZ, J.M., MULLINEAUX, P.M. and DEL RÍO, L.A (1998) An evaluation of the response of antioxidant systems in the tolerance of pea plants to long-term salt stress” Winter Meeting of the Society for Free Radical Research - European region. Granada, 17-19 Diciembre 1998. (Invited Work).

- HERNÁNDEZ J.A.**, TALAVERA J.M., GÓMEZ J.M., MARTINEZ-GÓMEZ P., DICENTA F. Y SEVILLA F. Respuesta de los sistemas antioxidantes a la infección por el virus de la Sharka (plum pox potyvirus) en plantas de albaricoquero (*Prunus armeniaca* L.)". XIII Reunión Nacional de la Sociedad Española de Fisiología Vegetal VI Congreso Hispano-Luso de Fisiología Vegetal. Sevilla, 19-22 Septiembre 1999.
- GÓMEZ, J.M., **HERNÁNDEZ, J. A.**, JIMÉNEZ, A. AND SEVILLA, F. Sistemas antioxidantes de cloroplastos y mitocondrias: su respuesta diferencial al estrés salino". XIII Reunión Nacional de la Sociedad Española de Fisiología Vegetal VI Congreso Hispano-Luso de Fisiología Vegetal. Sevilla, 19-22 Septiembre 1999
- JIMENEZ A, GÓMEZ J, **HERNANDEZ JA**, NAVARRO E Y SEVILLA F (2000) Estrés oxidativo inducido por salinidad en plantas: Estudio de antioxidantes a nivel celular y molecular. VI Reunión del Grupo Español de Radicales Libres y II Reunión Iberoamericana. Cádiz, Junio 2000. Invited work.
- GÓMEZ J, JIMENEZ A, **HERNANDEZ JA**, Y SEVILLA F (2000) Estrés salino y metabolismo del oxígeno activado en plantas de guisante. VI Reunión del Grupo Español de Radicales Libres y II Reunión Iberoamericana. Cádiz, Junio 2000. (Poster)
- GÓMEZ J.M., **HERNÁNDEZ J.A.**, JIMÉNEZ A Y SEVILLA F. (2000). Efecto del estrés salino en los sistemas antioxidantes de cloroplastos de plantas de guisante: estudio a nivel intraorganular. VIII Simposio Nacional-IV Ibérico de Nutrición Mineral de las Plantas. Murcia 8-12 de Octubre de 2000.
- ALONSO A., **HERNANDEZ J.A.**, JIMÉNEZ A, GÓMEZ J.M., NAVARRO E. Y SEVILLA F (2000) Respuesta de los sistemas antioxidantes de plantas de pimiento a la salinidad. VIII Simposio Nacional-IV Ibérico de Nutrición Mineral de las Plantas. Murcia 8-12 de Octubre de 2000
- ARGÜELLES JC, ZARAGOZA O, PEDREÑO Y, GÓNZALEZ-PÁRRAGA P, **HERNANDEZ JA** Y ÁLVAREZ-PERAL FJ (2001) Función de la trehalosa en la respuesta adaptativa de *Candida albicans* a estrés oxidativo. XIV Reunión Biebal de la Real Sociedad Española de Historia Natural. Murcia 18-21 Septiembre. (Comunicación Oral).
- HERNANDEZ JA**, ESCOBAR C, CREISSEN G and MULLINEAUX P. (2002) Effect of photoinhibition on the expression of antioxidant enzymes in pea plants. VI International Plant Peroxidase Symposium. Murcia 3-7 Julio 2002
- GONZÁLEZ-PÁRRAGA P, VERA M, ARGÜELLES J.C. y **HERNÁNDEZ J.A.** (2002) Función de las enzimas antioxidantes en la adquisición de respuesta adaptativa frente a estrés oxidativo en *Candida albicans*. VI Congreso Nacional de Micología. Valencia.
- HERNÁNDEZ JA**, RUBIO M, OLMOS, E., PORTILLO B, DICENTA F AND MARTINEZ-GÓMEZ P (2003). Effect of Plum Pox virus (PPV) infection on photosynthesis and antioxidant enzyme activity in peach (*Prunus persica* L. cv GF305). 19th International Symposium on virus and virus-like diseases of temperate fruit crops. 10th International Symposium on small fruit virus diseases. Valencia 21-25 Julio
- RUBIO M, GONSALVES B, **HERNÁNDEZ JA**, PALLAS V, DICENTA F AND MARTINEZ-GÓMEZ P. (2003). Localization of coat protein and nucleic acid of Plum Pox virus (PPV) in *Prunus* petiole and stem tissues. 19th International Symposium on

- virus and virus-like diseases of temperate fruit crops. 10th International Symposium on small fruit virus diseases. Valencia 21-25 Julio
- ARGÜELLES J.C., GONZÁLEZ-PÁRRAGA P, PEDREÑO Y; ZARAGOZA O y **HERNANDEZ JA** (2003) Posible sinergismo entre la síntesis de trehalosa y la inducción de actividades antioxidantes durante la respuesta a estrés oxidativo en *Candida albicans*. 4^a Reunión de la Red Española de Levaduras. El Escorial, 17-19 Diciembre (Madrid)
- HERNÁNDEZ J. A.**; RUBIO M., PORTILLO B., DICENTA F., AND MARTÍNEZ-GÓMEZ P. (2003) Response of antioxidant enzymes from peach (*Prunus persica* l. cv GF305) to Plum Pox virus infection. **Conference on Plant Stress, Reactive Oxygen and Antioxidants** (Freising-Weihenstephan, Germany, September 10 –13.
- GARCÍA-LEGAZ F, AGILAR A, PORTILLO B, LÓPEZ-GÓMEZ E, MATAIX-BENEYTO J, and **HERNÁNDEZ JA** (2003). Efecto del calcio sobre la actividad de enzimas antioxidantes de plantas de níspero y membrillo tratadas con NaCl. XV Reunión Nacional de la Sociedad Española de Fisiología Vegetal VIII Congreso Hispano-Luso de Fisiología Vegetal. Palma de Mallorca, 16-20 Septiembre
- BLAZQUEZ S, OLMOS E, **HERNÁNDEZ JA**, HELLÍN E, FERNÁNDEZ JA AND PIQUERAS A (2003). Somatic embryogenesis in saffron (*Crocus sativus* L.): morphological differentiation and the role of the antioxidant enzymatic system. 1st International Symposium on Saffron Biology and Biotechnology (ISSBB-2003) Albacete, 22-25 October
- PÁRRAGA P, CONESA S., PEDREÑO Y., AGUINAGA A. MARÍN F., PÉREZ ALVAREZ JA. y **HERNÁNDEZ J.A.**; ARGÜELLES J.C (2004) Contenido de glutatión durante la transición dimórfica inducida por suero humano en *Candida albicans*. VII Congreso Nacional de Micología. Salamanca.
- HERNANDEZ JA, DIAZ-VIVANCOS P, RUBIO M, DICENTA F, AND MARTÍNEZ-GÓMEZ P (2004).Oxidative stress induced by a long-term PPV infection in apricot. The 14th FESPB Congress. August 23-27, Cracow (Poland).
- DIAZ-VIVANCOS, P., RUBIO M, PERIAGO PM, MARTÍNEZ-GÓMEZ P AND **HERNÁNDEZ JA** (2005) Effect of Plum pox virus infection on the antioxidant capacity of leaf apoplast from apricot plants XIIIth International Symposium on apricot culture (Murcia, Spain).
- DIAZ-VIVANCOS, P., MESONERO, V. , RUBIO, M., PERIAGO, P. M., MARTÍNEZ-GÓMEZ, P. and **HERNÁNDEZ, J.A.** (2005) Effect of Plum pox virus infection on the antioxidant capacity of leaf apoplast from peach (cv. GF305) plants. XVI Reunión Nacional de la Sociedad Española de Fisiología Vegetal. IX Congreso Luso-Espanhol de Fisiologia Vegetal (Évora, Portugal, Septiembre 2005).
- HERNANDEZ JA, SAN JUAN MA, DIAZ-VIVANCOS P, LOPEZ-GÓMEZ E, MATAIX-BENEITO J, GARCIA-LEGAZ F (2005). Efecto De la salinidad y del portainjertos sobre los sistemas antioxidantes de plantas de níspero (*Eriobotrya japónica* Lindl.): Respuesta al aporte suplementario de boro. XVI Reunión Nacional de la Sociedad Española de Fisiología Vegetal. IX Congreso Luso-Espanhol de Fisiologia Vegetal (Évora, Portugal, Septiembre 2005).

- GONZÁLEZ-PÁRRAGA P., AGUINAGA A., MARTÍNEZ-ESPARZA M., PEDREÑO Y., ALONSO-MONGE R., PLA J., HERNÁNDEZ J.A. and J.C. ARGÜELLES (2005) Induction of antioxidant enzymatic activities in mutants of *Candida albicans* affected in the Hog pathway. XXVI ISSY. Oropesa del Mar, Castellón.
- PEDREÑO, S. CONESA, P. GONZÁLEZ-PÁRRAGA, J.A. HERNÁNDEZ AND J.C. ARGÜELLES. Neutral trehalase is not required for protection against oxidative stress in *Candida albicans*. XXVI ISSY. Oropesa del Mar, Castellón 2005
- DÍAZ-VIVANCOS P., RUBIO M., CLEMENTE M.J., MARTÍNEZ-GÓMEZ P. and HERNÁNDEZ J.A (2005) Effect of L-2-oxo-4-thiazolidine-carboxylic acid treatments in the response against plum pox virus infection in peach plants. Oxygen Metabolism, ROS and Redox Signalling in Plants. Bristol 18-20 December.
- HERNÁNDEZ J.A., DÍAZ-VIVANCOS P., RUBIO M., OLMOS E., ROS BARCELÓ A. AND MARTÍNEZ-GÓMEZ P (2006) Plum pox virus (PPV) infection produces an imbalance on the antioxidative systems in *Prunus* species. **Non-specific and Specific Innate and Acquired Plant Resistance Congress (Budapest 31 Agosto-3 Septiembre 2006). Oral Communication**
- MARTÍNEZ-GÓMEZ, P.; DÍAZ-VIVANCOS, P.; RUBIO, M.; DICENTA, F.; HERNÁNDEZ, J.A (2006) Development of molecular markers linkage to Plum pox virus (sharka) resistance in apricot. **Non-specific and Specific Innate and Acquired Plant Resistance Congress (Budapest 31 Agosto-3 Septiembre 2006). Oral Communication**
- DÍAZ-VIVANCOS P., RUBIO M., OLMOS E., GARCÍA JA, MARTÍNEZ-GÓMEZ P and HERNÁNDEZ J.A. (2006) Cambios inducidos por el plum pox virus (ppv) a nivel subcelular en el metabolismo antioxidativo de plantas de guisante. XIII Congreso de la Sociead Española de Fitopatología (Murcia 18-22 de Septiembre de 2006). (**Oral Communication**)
- M.J. CLEMENTE-MORENO, A. PIQUERAS, P. MARTÍNEZ-GÓMEZ, J.A. HERNÁNDEZ (2008) Estudio del metabolismo antioxidativo en plantas in vitro de melocotonero GF305 en respuesta al Plum pox virus (PPV): Efecto de los tratamientos con BTH y OTC. **XIV Congreso de la Sociedad Española de Fitopatología** (Lugo 15-19 de Septiembre de 2008).
- M.J. CLEMENTE-MORENO, P. DÍAZ-VIVANCOS, G. BARBA-ESPÍN; J.R.Rodríguez, J. A. HERNÁNDEZ (2008) Partial protection against Plum pox virus (PPV) induced by benzothiadiazole and L-2-oxothiazolidine-4-carboxylic acid in pea plants. **XIV Congreso de la Sociedad Española de Fitopatología** (Lugo 15-19 de Septiembre de 2008).
- HERNÁNDEZ JA**, CLEMENTE-MORENO MJ, BARBA-ESPÍN G, DÍAZ-VIVANCOS P (2008) Bases Fisiológicas y Bioquímicas de la Respuesta de los Prunus a la infección por Plum Pox Virus (PPV): Función de los mecanismos antioxidantes. VI Jornadas de Fisiología Vegetal de la Societat Catalana de Biología. Barcelona, 19 Noviembre de 2008. **Invited Communication.**
- PADILLA, I.M.G., BARBA-ESPIN, G., **HERNÁNDEZ, J.A.**, BURGOS, L., PIQUERAS, A. (2009). Conservación de secciones nodales de neem (*Azadirachta indica* A. Juss) mediante encapsulación-refrigeración: Efecto del ácido acetil-salicílico. VIII Reunión de la Sociedad Española De Cultivo In Vitro de Tejidos Vegetales. Murcia.

- CLEMENTE-MORENO MJ, PIQUERAS A, MARTINEZ-GOMEZ P, **HERNANDEZ JA.**
Estudio del metabolismo antioxidativo en plantas in vitro de melocotonero GF305 en respuesta al Plum Pox Virus (PPV): Efecto de los tratamientos con BTH y OTC. VIII Reunión de la Sociedad Española de Cultivo In Vitro de Tejidos Vegetales. Murcia, Septiembre 2009. Poster.
- FAIZE M, FAIZE L, PIQUERAS A, NICOLAS E, BARBA-ESPIN G, CLEMENTE-MORENO MJ, **HERNANDEZ JA**, ALARCON JJ, ARTLIP T, BURGOS L. Las enzimas citosólicas superóxido dismutasa y ascorbato peroxidasa mejoran sinérgicamente la tolerancia a la sequía y la resistencia a la enfermedad bacteriana del “mal del fuego” en plantas transgénicas de tabaco. VIII Reunión de la Sociedad Española de Cultivo In Vitro de Tejidos Vegetales. Murcia, Septiembre 2009. Poster.
- MARÍA JOSÉ CLEMENTE-MORENO, **JOSÉ ANTONIO HERNÁNDEZ**, ANA GARCÍA-IBARRA, ABEL PIQUERAS, PEDRO DIAZ-VIVANCOS. Looking for Biochemical Sharka Resistance: Role of the Antioxidative Metabolism. II Reunión de la Red Nacional de Virología de Plantas. Puerto de Santa María, 8-10 Marzo 2010. **(Oral Communication)**
- S.M. Ortigosa, P. Díaz-Vivancos, M.J. Clemente Moreno, M. Pintó-Marijuan, I. Fleck, J. Veramendi, **J.A. Hernandez**, M. Santos and J.M. Torné. SOBREEXPRESIÓN DE LA TRANSGLUTAMINASA DE MAÍZ EN CLOROPLASTOS DE TABACO. V Encuentro Internacional de Biotecnología BIOSpain 2010, Pamplona, 29 Septiembre a 1 Octubre 2010. **(Oral Communication)**.
- HERNÁNDEZ J.A.**, DÍAZ-VIVANCOS P., RUBIO M., OLMOS E., ROS BARCELÓ A. AND MARTÍNEZ-GÓMEZ P (2006) Plum pox virus (PPV) infection produces an imbalance on the antioxidative systems in *Prunus* species. Non-specific and Specific Innate and Acquired Plant Resistance Congress (Budapest 31 Agosto-3 Septiembre 2006). **Oral Communication.**
- MARTÍNEZ-GÓMEZ, P.; DÍAZ-VIVANCOS, P.; RUBIO, M.; DICENTA, F.; **HERNÁNDEZ, J.A** (2006) Development of molecular markers linkage to Plum pox virus (sharka) resistance in apricot. Non-specific and Specific Innate and Acquired Plant Resistance Congress (Budapest 31 Agosto-3 Septiembre 2006). **Oral Communication.**
- M.J. CLEMENTE, P. DÍAZ-VIVANCOS, **J.A. HERNÁNDEZ** (2007) Protección frente a PPV (Sharka) en plantas de guisante mediante la aplicación de OTC y BTH. XVII Reunión Nacional de la Sociedad Española de Fisiología Vegetal. X Congresso Luso-Espanhol de Fisiologia Vegetal. Alcalá de Henares, Septiembre 2007.
- K. MAJOURHAT, P. DÍAZ-VIVANCOS, J.A. FERNÁNDEZ¹, **J.A. HERNÁNDEZ**, A. PIQUERAS (2007) INDUCCIÓN DE BROTAJÓN AXILAR PARA MICROPROPAGACIÓN DE AZAFRÁN (*CROCUS SATIVUS L.*). RESPUESTA DEL SISTEMA ENZIMÁTICO ANTIOXIDANTE. XVII Reunión Nacional de la Sociedad Española de Fisiología Vegetal. X Congresso Luso-Espanhol de Fisiologia Vegetal. Alcalá de Henares, Septiembre 2007.
- A. BERNAL-VICENTE, **J. A. HERNÁNDEZ**, F. TITTARELLI, P. DÍAZ VIVANCOS, J.A. PASCUAL VALERO (2007) COMPOSTS VEGETALES COMO ALTERNATIVA A LAS TURBAS EN SEMILLERO. IMPLICACIONES EN EL

CONTROL BIOLÓGICO DE LA FUSARIOSIS DE MELÓN MEDIANTE INDUCCIÓN SISTÉMICA DE DEFENSA EN PLANTA. XVII Reunión Nacional de la Sociedad Española de Fisiología Vegetal. X Congreso Luso-Español de Fisiología Vegetal. Alcalá de Henares, Septiembre 2007.

- P. DÍAZ-VIVANCOS, M.J. CLEMENTE, E. OLMOS, J.A. GARCÍA, P. MARTÍNEZ-GÓMEZ, **J.A. HERNÁNDEZ** (2007) Cambios inducidos por PPV en los sistemas antioxidantes y expresión de proteínas de plantas de guisante a nivel subcelular. XVII Reunión Nacional de la Sociedad Española de Fisiología Vegetal. X Congreso Luso-Español de Fisiología Vegetal. Alcalá de Henares, Septiembre 2007.
- A. ROS BARCELÓ, M.J. LÓPEZ NÚÑEZ-FLORES, L.V. GÓMEZ-ROS, M. FAIZE, M. SOTTOMAYOR, F. POMAR, **J.A. HERNÁNDEZ**, A. ESTEBAN-CARRASCO, J.M. ZAPATA (2007) H₂O₂ as an autocrine and paracrine signalling molecule in plants. XVII Reunión Nacional de la Sociedad Española de Fisiología Vegetal. X Congreso Luso-Español de Fisiología Vegetal. Alcalá de Henares, Septiembre 2007.
- DÍAZ-VIVANCOS, P., CLEMENTE MJ., RUBIO M, OLMOS E, GARCIA JA, MARTÍNEZ-GÓMEZ, P. and **HERNÁNDEZ, J.A.** (2007) PPV-induced changes on the antioxidative systems and protein expression at subcelular level in pea plants. ROS in Plants SFFR Plant Oxygen Group meeting on reactive oxygen and nitrogen species. Signalling & Metabolism, Oxidative stress, Antioxidants. Gante, Septiembre 2007.
- GRISALY GARCÍA, **JOSÉ A. HERNÁNDEZ**, PEDRO DÍAZ-VIVANCOS, MARÍA JOSÉ CLEMENTE-MORENO, MARINA GARCÍA (2008) Daño oxidativo y actividad sod y pox en simplasto y apoplasto de raíces de dos genotipos de *Allium cepa* L. sometidos a estrés salino. XIII Reunión Latinoamericana. XXVII Reunión Argentina de Fisiología Vegetal. Rosario-21 al 24 de septiembre de 2008 (Argentina).
- PIQUERAS A., CLEMENTE-MORENO MJ, DIAZ-VIVANCOS P, **HERNANDEZ JA** (2009) Antioxidative metabolism response induced by PPV (Plum Pox virus) in micropropagated plantlets of peach GF305: Effect of treatments with BTH and OTC. In vitro Biology Meeting (Society for in vitro Biology), Charleston, North Caroline, USA, 2009.
- Barba-Espín G., Diaz-Vivancos P., Clemente MJ., Albacete A., Faize L., Faize M., **Hernández J.A.**(2009) EFFECT OF HYDROGEN PEROXIDE ON GERMINATION, ANTIOXIDATIVE METABOLISM AND PROTEIN EXPRESSION IN PEA PLANTS. ROS Congress 2009. Helsinki.
- María José Clemente-Moreno, Pedro Díaz-Vivancos, Gregorio Barba-Espín; Jose Ramón Rodríguez, José Antonio Hernández. BTH and OTC treatments reduced the severity of Sharka symptoms in pea leaves: effect on the antioxidative metabolism at subcellular level. ROS Congress 2009. Helsinki.**
- Faize M., Faize L., Piqueras A., Nicolas E., Barba-Espín G., Clemente-Moreno M.J., Burgos L., Alarcón J.J., Artlip T., **Hernández J.A.** Cytosolic superoxide dismutase and ascorbate peroxidase differentially improve drought tolerance and wildfire disease resistance in transgenic tobacco. ROS Congress 2009. Helsinki.
- Barba-Espín G., Diaz-Vivancos P., Clemente-Moreno M. J., Albacete A., Faize L., Faize M., **Hernández J.A.**(2009) EFFECT OF HYDROGEN PEROXIDE ON GERMINATION, ANTIOXIDATIVE METABOLISM, PROTEIN EXPRESSION

AND ABA CONTENTS IN PEA SEEDLINGS. 5th International Symposium On Seed, Transplant and Stand Establishment of Horticultural Crops: Integrating Methods for Producing More with Less. Murcia-Almería (SPAIN). 27 Septiembre a 1 de Octubre de 2009. (**Oral Communication**).

- REQUENA, M., GONZALEZ, L., EZZIYYANI, M., EGEEA-GILABERT, C., REQUENA, A.M., HERNÁNDEZ, J.A., BARBA, G., OLMOS, E., CANDELA, M.E. (2009). Producción de especies reactivas de oxígeno y alteración de las enzimas antioxidantes durante la respuesta hipersensible a *Phytophthora capsici* en *Capsicum annuum*. XVII Reunión española de Fisiología Vegetal. X Congreso Hispano-Luso de Fisiología Vegetal. Zaragoza
- CLEMENTE-MORENO MJ; DIAZ-VIVANCOS P, BARBA-ESPÍN G, MARTÍNEZ-GÓMEZ P., HERNÁNDEZ JA. L-2-oxothiazolidine-4-carboxylic acid (OTC) partially protects peach plants from Sharka disease: Effect in antioxidative metabolism and protein expression. XVII Congress of the Federation of European Societies of Plant Biology (FESPB), Valencia 4-9 Julio 2010.
- BARBA-ESPÍN G., DÍAZ-VIVANCOS P., CLEMENTE-MORENO M.J., JOB D., BELGHAZI M., HERNÁNDEZ JA, JOB C. EFFECT OF HYDROGEN PEROXIDE ON CARBOXYLATED PROTEIN LEVELS DURING PEA SEED GERMINATION. XVII Congress of the Federation of European Societies of Plant Biology (FESPB), Valencia 4-9 Julio 2010.
- CLEMENTE-MORENO M.J., DIAZ-VIVANCOS P., RUBIO M., HERNÁNDEZ J.A. Sharka resistance: The role of the antioxidant metabolism. International Symposium on Plum Pox Virus", Sofía (Bulgaria) 5-9 septiembre 2010
- CLEMENTE-MORENO M.J., DIAZ-VIVANCOS P.,HERNÁNDEZ J.A (2011) L-2-OXOTHIAZOLIDINE-4-CARBOXYLIC ACID (OTC) PROTECTS PEACH PLANTS FROM SHARKA DISEASE: EFFECT ON ANTIOXIDATIVE METABOLISM AND PROTEIN EXPRESSION. 10th International Conference on Reactive Oxygen and Nitrogen Species in Plants, 5-8 July, 2011, Budapest, Hungary.
- Gregorio Barba-Espín, Maria José Clemente-Moreno, Sara Álvarez, Manuel Francisco García-Legaz, José Antonio Hernández, Pedro Díaz-Vivancos. (2011)SALICYLIC ACID NEGATIVELY AFFECTS THE RESPONSE TO SALT STRESS IN PEA PLANTS. 10th International Conference on Reactive Oxygen and Nitrogen Species in Plants, 5-8 July, 2011, Budapest, Hungary.
- P. Díaz-Vivancos, L. Faize, G. Barba-Espin, M.J. Clemente-Moreno, C. Petri, J.A. Hernandez, L. Burgos and M. Faize (2011)EXPRESSION OF CYTOSOLIC SOD AND APX TRANSGENES IN PLUM IMPROVES VIGOR AND SHOOT REGENERATION AND CONFERS SALT STRESS TOLERANCE.10th International Conference on Reactive Oxygen and Nitrogen Species in Plants, 5-8 July, 2011, Budapest, Hungary.
- Barba-Espín G,Diaz-Vivancos P,Job D, Belghazi M, Job C, and Hernández JA (2011)ROLE OF H₂O₂ DURING PEA SEED GERMINATION: A COMBINED PROTEOMIC AND HORMONE PROFILING APPROACH. 10th International Conference on Reactive Oxygen and Nitrogen Species in Plants, 5-8 July, 2011, Budapest, Hungary. (**Invited Communication**).

Supervised Thesis

TITLE: Respuesta al estrés oxidativo (H₂O₂) en *Candida albicans*: función protectora del glutatión y las enzimas antioxidantes.

PhD student: Pilar González Párraga

UNIVERSITY: Univ. Murcia (Spain), 2007

TITLE: Expresión diferencial de proteínas y estudio del metabolismo antioxidativo de *Prunus* sp. y de plantas de guisante (*Pisum sativum* L.) en respuesta al Plum pox virus (PPV) a nivel subcelular

PhD student: Pedro Díaz Vivancos

UNIVERSITY: Univ. Cartagena (Spain) 2007

TITLE: Bases fisiológicas y bioquímicas de la respuesta de plantas de melocotonero y de guisante a la infección por PPV: Función del glutatión

PhD student: María José Clemente

UNIVERSITY: Univ. Murcia (2011)

TITLE: Función del metabolismo antioxidativo en la germinación, crecimiento y respuesta al Plum pox virus (PPV) en plantas de guisante y en diferentes especies de *Prunus*: Efecto en la expresión de proteínas.

PhD student: Gregorio Barba Espín

UNIVERSITY: Univ. Murcia (2011), under revision.

Postdoctoral Stays.

Stay during 25 months in the Laboratoire de Biotechnologie Végétale (Ecole Nationale Supérieure Agronomique de Toulouse, France) under supervision of Dr. J.C. Pech.

Object: Characterization of a multigene familie encoding ACC Oxidase in melon plants.

Stay during 6 moths in the Dept Applied Genetics (John Innes Centre, Norwich, England) under supervision of Dr. P. Mullineaux.

Object: Molecular genetic basis of oxidative stress responses in peas grown under excess light and salt-stress conditions.