

Selection of publications derived from the PhD Thesis defended in the Programme

02E4-PHD ON BIOTECHNOOLOGY AND GENETIC RESOURCES OF PLANTAS AND ASSOCIATED MICROORGANISMS

Name of the PhD	Date of Defence	PhD Supervisor/s	Derived Publication	Quality Index
Academic Year 2015-2016				
1 GARRIDO ARANDIA, MARIA	09/05/2016	DÍAZ PERALES, ARACELI (UPM)	Garrido-Arandia, M, Silva-Navas, J, Ramirez-Castillejo, C, Cubells-Baeza, N, Gómez-Casado, C, Barber, D, del Pozo, JC, González-Melendi, P, Pacios, LF, Diaz-Perales, A. 2016. Characterisation of a flavonoid ligand of the fungal protein Alt a 1. Scientific Reports, 6, article 33468/1-9. DOI: 10.1038/srep33468	IF: 4,122; Q1; citas: 6; 14 publicaciones 5 1er autor; Premio de Doctorado 2015-2016
Academic Year 2016-2017				
1 GARCÍA BENITEZ, CARLOS	20/06/2017	CAL Y CORTINA, M. ANTONIETA (INIA)	Garcia-Benitez, C, Melgarejo, P, De Cal, A, Fontaniella, B. 2016. Microscopic Analyses of Latent and Visible Monilinia fructicola Infections in Nectarines. PLoS ONE 11 (8): e0160675. DOI: 10.1371/journal.pone.0160675/	IF: 2,806; Q1; citas: 7; 4 publicaciones 4 1er autor
2 CUBELLS BAEZA, NURIA	21/07/2017	DIAZ PERALES, ARACELI (UPM)	Cubells-Baeza, N, Gómez-Casado, C, Tordesillas, L, Ramirez-Castillejo, L, Garrido-Arandia, M, González-Melendi, P, Herrero, M, Pacios, LF; Díaz-Perales, A. 2017. Identification of the ligand of Pru p 3, a peach LTP. Plant Molecular Biology 94(1):33-44. DOI: 10.1016/j.imb.2005.11.063	IF: 3,543; Q1; citas: 5 5 publicaciones
3 SENOVILLA RAMOS, MARTA	09/10/2017	GONZÁLEZ GUERRERO, MANUEL	Senovilla M, Castro-Rodríguez R, Abreu I, Escudero V, Kryvoruchko I, Udvardi MK, Imperial J, González-Guerrero M. 2018. Medicago truncatula copper transporter1 (MtCOPT1) delivers copper for symbiotic nitrogen fixation. New Phytol. 218: 696-709. DOI: 10.1111/nph.14992.	IF: 7,433; Q1; citas: 2 3 publicaciones
4 CASTRO RODRÍGUEZ, MARÍA DEL ROSARIO	30/10/2017	GONZÁLEZ GUERRERO, MANUEL (UPM)	Tejada-Jiménez M, Castro-Rodríguez R, Kryvoruchko IS, Lucas MM, Udvardi M, Imperial J, González-Guerrero M. 2015. Medicago truncatula Natural Resistance Associated Macrophage Protein1 is required for iron uptake by rhizobia-infected nodule cells. Plant Physiol. 168:258-275. DOI: 10.1104/pp.114.254672	IF: 7,210; Q1; citas: 24 4 publicaciones
Academic Year 2017-2018				
1 PERIAÑEZ RODRIGUEZ, JUAN	14/12/2017	MORENO RISUEÑO, MIGUEL ANGEL (UPM)	Perianez-Rodriguez J, Manzano C, Moreno-Risueno M.A. (2014). Post-embryonic organogenesis and plant regeneration from tissues: two sides of the same coin? Front Plant Sci. 5: 219:1-11.	IF: 3.948; Q1; citas: 31 3 publicaciones
2 SWAMI, SANJAY	31/01/2018	JORDA MIRO, LUCIA (UPM); TORRES LACRUZ, MIGUEL ANGEL (UPM)	Sopeña-Torres, S, Jordá, L, Sánchez-Rodríguez, C, Miedes, E, Escudero, V, Swami, S, López, G, Piślewska-Bednarek, M, Lassowskat, I, Lee, J, Gu, Y, Haigis, S, Alexander, D, Pattathil, S, Muñoz-Barrios, A, Bednarek, P, Somerville, S, Schulze-Lefert, P, Hahn, MG, Scheel, D, Molina, A. 2018. YODA MAP3K kinase regulates plant immune responses conferring broad-spectrum disease resistance. New Phytologist, 218(2):661-680. DOI: 10.1111/nph.15007	IF: 7,433, Q1, citas: 7 3 publicaciones
3 BERA, SAYANTA	19/02/2018	GARCÍA-ARENAL, FERNANDO (UPM)	Bera, S; Moreno-Pérez, MG; García-Figuera, S; Pagán, I; Fraile, A; Pacios, LF; García-Arenal, F. 2017. Pleiotropic effects of resistance-breaking mutations on particle stability provide insight on life history evolution in a plant RNA virus. Journal of Virology 91:e00435-17. DOI: 10.1128/JVI.00435-17	IF: 4,633; Q1; citas: 5 2 publicaciones 2 1er autor
4 SHUKLA, AAYUSHI	21/02/2018	GARCÍA-ARENAL, FERNANDO (UPM)	Shukla, A, Pagán, I, Garcia-Arenal, F. 2018. Effective tolerance based on resource re-allocation is a virus-specific defence in Arabidopsis thaliana. Molecular Plant Pathology 19: 1454-1465. DOI: 10.1111/mpp.12629	IF: 4,188; Q1; citas: 5
5 RUANO BLANCO, GUILLERMO	02/03/2018	ROJO DE LA VIESCA, ENRIQUE	Taurino M, Costantini S, De Domenico S, Stefanelli F, Ruano G, Delgadillo MO, Sánchez-Serrano JJ, Sanmartín M, Santino, Rojo E. SEIPIN Proteins Mediate Lipid Droplet Biogenesis to Promote Pollen Transmission and Reduce Seed Dormancy. Plant Physiol 176(2):1531-1546. DOI: 10.1104/pp.17.01430	IF: 5,949; Q1; citas: 3

6	BACETE CANO, LAURA	26/04/2018	MOLINA FERNÁNDEZ, ANTONIO (UPM); MIEDES	Bacete, L; Mérida, H; Miedes, E, Molina, A. 2018, Plant cell wall-mediated immunity: cell wall changes trigger disease resistance responses. The Plant Journal 93	IF: 5,775; Q1; citas:12 4 publicaciones; Premio de Doctorado 2017-2018
7	SOENENS MARTÍNEZ DE MURGUÍA, AMALIA	14/06/2018	IMPERIAL RÓDENAS, JUAN	Soenens A, Gomila M, Imperial J. 2018. Neorhizobium tomejilense sp. nov., first non-symbiotic Neorhizobium species isolated from a dryland agricultural soil in southern Spain. Syst Appl Microbiol S0723-2020(18)30214-5. DOI: 10.1016/j.syapm.2018.09.001	IF: 3,899; Q1; 2 publicaciones 2 1er autor
8	LÓPEZ GONZÁLEZ, SILVIA	11/07/2018	PONZ ASCASO, FERNANDO (I)NI	López-González, S, Aragónés, V, Daròs, J-A; Sánchez, F, Ponz, F. 2016. An infectious cDNA clone of a radish-infecting Turnip mosaic virus strain. European Journal of Plant Pathology 148:207-211. DOI: 10.1007/s10658-016-1057-9.	IF: 1,478; Q1; citas: 2 4 publicaciones
9	RODRÍGUEZ NEVADO, CRISTINA	16/07/2018	PAGÁN MUÑOZ, JESÚS ISRAEL	Rodríguez-Nevado, C; Lam, TTY; Holmes, EC; Pagán, I. 2018. The impact of host genetic diversity on virus evolution and emergence. Ecology Letters 21: 253-263. DOI: 10.1111/ele.12890.	IF: 9,137; Q1; citas: 2 2 publicaciones 2 1er autor
10	GÓMEZ PÁEZ, DENNYS MARCELA	17/10/2018	JESÚS VICENTE CARBAJOSA (UPM) y JOAQUÍN MEDINA ALCÁZAR	Hossain, A; Henríquez-Valencia, C; Gómez-Páez, M; Medina, J; Orellana, A; Vicente-Carbajosa, J; Zouhar, J. 2016. "Identification of novel components of the Unfolded Protein Response in Arabidopsis". Frontiers in Plant Science. DOI: 10.3389/fpls.2016.00650	IF: 3,678; Q1; citas: 7 2 publicaciones
11	PÉREZ GONZÁLEZ, ANA	28/10/2018	ELENA CARO BERNAT	Pérez-González, A; Kniewel, R; Veldhuizen, M; Verma, HK; Navarro-Rodríguez, M; Rubio, LM; Caro, E. 2017. "Adaptation of the GoldenBraid modular cloning system and creation of a toolkit for the expression of heterologous proteins in yeast mitochondria". BMC Biotechnology. DOI: 10.1186/s12896-017-0393-y". Q2	IF: 2,605; Q2; citas: 7 2 publicaciones
Academic Year 2018-2019					
1	ÁLVAREZ ARAGÓN, ROCÍO	13/12/2018	BEGOÑA BENITO CASADO (UPM)	Álvarez-Aragón, R; Haro, R; Benito, B, Rodríguez-Navarro, A. 2016. Salt intolerance in Arabidopsis: shoot and root sodium toxicity, and inhibition by sodium-plus-potassium overaccumulation. Planta, Jan;243(1):97-114. DOI: 10.1007/s00425-015-2400-7	IF: 3,347; Q1; citas:10 2 publicaciones 1er autor
2	GONZÁLEZ CABRERO, NURIA	30/01/2019	CRISTINA CELESTINO MUR	González-Cabrero, N; Ruiz-Galea, M; Alegre, J; Toribio, M; Celestino, C. 2018. Growth, morphology and maturation ability of Pinus pinea embryogenic suspension cultures. Plant Cell Tiss Organ Cult 135: 331. DOI: 10.1007/s11240-018-1467-9	IF: 3,678; Q2; citas: 1
3	GIL DÍAZ, PATRICIA	04/02/2019	MANUEL GONZÁLEZ GUERRERO (UPM) Y MANUEL TEJADA JIMÉNEZ	Gil-Díez, P; Tejada-Jiménez, M; León-Mediavilla, J; Wen, J; Mysore, KS; Imperial, J; González-Guerrero, M. 2018. MtMOT1.2 is responsible for molybdate supply to Medicago truncatula nodules. Plant Cell Environ. DOI: 10.1111/pce.13388.	IF: 5,415; Q1; citas: 5; 3 publicaciones
4	SÁNCHEZ MONTESINO, ROCÍO	01/03/2019	LUÍS OÑATE SÁNCHEZ (UPM)	Sánchez-Montesino, R.; Bouza-Morcillo, L.; Marquez, J.; Ghita, M.; Duran-Nebreda, S.; Gómez, L.; Holdsworth, M.J.; Bassel, G.; Oñate-Sánchez, L. 2019. "A regulatory module controlling GA-mediated endosperm cell expansion is critical for seed germination in Arabidopsis". Molecular Plant. DOI: 10.1016/j.molp.2018.10.009.	IF: 4,188; Q1; citas: 2
5	LEÓN MEDIAVILLA, JAVIER	23/05/2019	MANUEL GONZÁLEZ GUERRRO (UPM)	León-Mediavilla, J; Senovilla, M; Montiel, J; Gil-Díez, P; Saez, A; Kryvoruchko, IS; Reguera, M; Udvardi, MK; Imperial, J; González-Guerrero, M. 2018. MtMTP2-facilitated zinc transport into intracellular	IF: 3,678; Q1; citas: 2 3 publicaciones
6	HERNÁNDEZ ESCRIBANO, LAURA	03/07/2019	ROSA RAPOSO LLOBET	Herbaceous plants in the understory of a pitch canker-affected Pinus radiata plantation are endophytically infected with Fusarium circinatum. Hernandez-Escribano, L., Iturrirxa, E., Elvira-Recuenco, M., ...García, I., Raposo, R. Fungal Ecology, 2018, 32, pp. 65-71	IF: 2,656; Q1; citas: 10 6 publicaciones
7	TRIOZZI, PAOLO MARIA	09/07/2019	MARIANO MANUEL PERALES (UPM); ISABEL MARTA ALLONA ALBERICH (UPM)	Photoperiodic regulation of shoot apical growth in poplar. Triozzi, P.M., Ramos-Sánchez, J.M., Hernández-Verdeja, T., ... Allona, I., Perales, M. Frontiers in Plant Science, 2018, 9, 1030	IF: 4,407; Q1; citas: 5 4 publicaciones
8	GUZMAN BENITO, IRENE	20/09/2019	CESAR LLAVE CORREAS,	The immune repressor BIR1 contributes to antiviral defense and undergoes transcriptional and post-transcriptional regulation during viral infections. Guzmán-Benito, I., Donaire, L., Amorim-Silva, V., ... Ruiz-Ferrer, V., Llave, C. New Phytologist, 2019, 224(1), pp. 421-438	IF: 8,512; Q1; citas:1 3 publicaciones

9	SÁNCHEZ MONTESINOS, ROCIO	20/09/2019	LUÍS OÑATE SÁNCHEZ (UPM)	A Regulatory Module Controlling GA-Mediated Endosperm Cell Expansion Is Critical for Seed Germination in Arabidopsis. Sánchez-Montesino, R., Bouza-Morcillo, L., Marquez, J., ... Bassel, G., Oñate-Sánchez, L. <i>Molecular Plant</i> , 2019, 12(1), pp. 71-85	IF: 8,820; Q1; citas:13 3 publicaciones
Academic Year 2019-2020					
1	ARNAIZ ALONSO, ANA	12/11/2019	M. ESTRELLA SANTAMARIA (UPM); M ISABEL DIAZ RODRIGUEZ	Arabidopsis kunitz trypsin inhibitors in defense against spider mites. Arnaiz, A., Talavera-Mateo, L., Gonzalez-Melendi, P., ... Diaz, I., Santamaria, M.E. <i>Frontiers in Plant Science</i> , 2018, 9, 986	IF: 4,407; Q1; citas:89 9 publicaciones; Premio de Doctorado 2018-2019
2	DIEZMA NAVAS, LAURA	08/11/2019	CÉSAR LLAVE CORREAS; VIRGINIA RUIZ FERRER	Crosstalk between epigenetic silencing and infection by tobacco rattle virus in Arabidopsis. Diezma-Navas, L., Pérez-González, A., Artaza, H., ... Llave, C., Ruiz-Ferrer, V. <i>Molecular Plant Pathology</i> , 2019, 20(10), pp. 1439-1452	IF: 4,379; Q1; citas:91 1 publicación
3	DOMINGUEZ FIGUEROA, JOSE DOMINGO	18/11/2019	JOAQUIN MEDINA ALCÁZAR; JESUS VICENTE CARBAJOSA (UPM)	HvPap-1 C1A protease and HvCPI-2 cystatin contribute to barley grain filling and germination. Diaz-Mendoza, M., Dominguez-Figueroa, J.D., Velasco-Arroyo, B., ... Diaz, I., Martinez, M. <i>Plant Physiology</i> , 2016, 170(4), pp. 2511-2524	IF: 6,902; Q1; citas:178 8 publicaciones
4	GUILLEM AMAT, ANA	31/10/2019	FÉLIX ORTEGO ALONSO	Functional characterization and fitness cost of spinosad-resistant alleles in <i>Ceratitis capitata</i> . Guillem-Amat, A., Ureña, E., López-Errasquin, E., ... Hernández-Crespo, P., Ortego, F. <i>Journal of Pest Science</i> , 2020, 93(3), pp. 1043-1058	IF: 5,160; Q1; citas:45 5 publicaciones
5	NAVARRO RODRIGUEZ, MONICA	31/10/2019	LUIS MANUEL RUBIO HERRERO (UPM)	Genetic and biochemical analysis of the azotobacter vinelandii molybdenum storage protein. Navarro-Rodríguez, M., Buesa, J.M., Rubio, L.M. <i>Frontiers in Microbiology</i> , 2019, 10(MAR), 579	IF: 4,076; Q1; citas:22 2 publicaciones
6	PRIETO GODOY, MARIO	28/11/2019	MARK DENIS WILKINSON (UPM)	Data-driven classification of the certainty of scholarly assertions. Prieto, M., Deus, H., de Waard, A., ...García-Jiménez, B., Wilkinson, M.D. <i>PeerJ</i> , 2020, 2020(4), e8871	IF: 2,380; Q1; citas:03 3 publicaciones
7	GÓMEZ SÁNCHEZ, ANDREA	22/06/2020	M. ISABEL DIAZ RODRIGUEZ (UPM); PABLO GONZALEZ-MELENDE DE LEON (UPM)	Repression of drought-induced cysteine-protease genes alters barley leaf structure and responses to abiotic and biotic stresses. Gomez-Sanchez, A., Gonzalez-Melendi, P., Santamaria, M.E., ... Martinez, M., Diaz, I. <i>Journal of Experimental Botany</i> , 2019, 70(7), pp. 2143-2155	IF: 5,908; Q1; citas:92 2 publicaciones
8	ORTEGA CAMPAYO, VICTOR	18/09/2020	ANE SESMA GALARRAGA	Virulence- and signaling-associated genes display a preference for long 3'UTRs during rice infection and metabolic stress in the rice blast fungus. Rodríguez-Romero, J., Marconi, M., Ortega-Campayo, V., ...Wilkinson, M.D., Sesma, A. <i>New Phytologist</i> , 2019, 221(1), pp. 399-414	IF: 8,512; Q1; citas:22 2 publicaciones
Academic Year 2020-2021					
1	DIAZ GONZÁLEZ, SANDRA	15/02/2021	M. SOLEDAD SACRISTAN BENAYAS (UPM), FREDERIC BRUNNER,	Diaz-González, S., Marín, P., Sánchez, R., Arribas, C., Kruse, J., González-Melendi, P., Brunner, F., Sacristán, S. 2020. Mutualistic Fungal Endophyte <i>Colletotrichum tofieldiae</i> Ct0861 Colonizes and Increases Growth and Yield of Maize and Tomato Plants. <i>Agronomy</i> 10, 1493. DOI: 10.3390/agronomy10101493	IF: 1,683; Q1; citas:22 2 publicaciones; 1 patente; Doctorado Industrial
2	ESEVERRI SÁBATE, ALVARO	01/02/2021	ELENA CARO BERNAT, LUIS MANUEL RUBIO HERRERO (UPM)	Eseverri, Á., López-Torrejón, G., Jiang, X., Burén, S., Rubio, L.M., Caro, E. 2020. Use of synthetic biology tools to optimize the production of active nitrogenase Fe protein in chloroplasts of tobacco leaf cells. <i>Plant Biotechnology Journal</i> . DOI: 10.1111/pbi.13347	IF: 8,154; Q1; citas:79 9 publicaciones
3	SÁNCHEZ CORRIONERO, ALVARO	02/03/2021	MIGUEL ANGEL MORENO RISUEÑO (UPM)	Serrano-Ron, L., Perez-Garcia, P., Sanchez-Corrionero, A., Gude, I., Cabrera, J., Ip, P.-L., Birnbaum, K.D., Moreno-Risueno, M.A. 2021. RECONSTRUCTION OF LATERAL ROOT FORMATION THROUGH SINGLE-CELL RNA-SEQ REVEALS ORDER OF TISSUE INITIATION. <i>Molecular Plant</i> . DOI: 10.1016/j.molp.2021.05.028	IF: 12,084; Q1; citas:03 3 publicaciones;
4	VELÁZQUEZ LAM, EDITH	05/02/2021	FERNANDO PONZ ASCASO,	Velázquez-Lam, E., Imperial, J., Ponz, F. 2020. Polyphenol-Functionalized Plant Viral-Derived Nanoparticles Exhibit Strong Antimicrobial and Antibiofilm Formation Activities. <i>ACS Applied Bio Materials</i> . DOI: 10.1021/acsbm.9b01161	IF: 3,250; Q2; citas:21 1 publicación

5	PAYA TORMO, LUCIA	26/02/2021	LUIS MANUEL RUBIO HERRERO, CARLOS ECHEVARRIA ERASUN (UPM)	Jiang, X., Payá-Tormo, L., Coroian, D., García-Rubio, I., Castellanos-Rueda, R., Eseverri, Á., López-Torrejón, G., Burén, S., Rubio, L.M. 2021. Exploiting genetic diversity and gene synthesis to identify superior nitrogenase NifH protein variants to engineer N ₂ -fixation in plants. <i>Communications Biology</i> 4, 1–11. DOI: 10.1038/s42003-020-01536-6	IF: 12,121; Q1; citas:12 publicaciones
6	JEAN PAUL CERNA VARGAS	21/05/2021	EMILIA LÓPEZ SOLANILLA (UPM)	Cerna-Vargas, J.P., Santamaria-Hernando, S., Matilla, M.A., Rodríguez-Herva, J.J., Daddaoua, A., Rodríguez-Palenzuela, P., Krell, T., López-Solanilla, E. 2019. Chemoperception of Specific Amino Acids Controls Phytopathogenicity in <i>Pseudomonas syringae</i> pv. tomato. <i>mBio</i> 10, e01868-19. DOI: 10.1128/mBio.01868-19	IF: 6,784; Q1; citas:10 publicaciones
7	BRUNO CUEVAS-ZUVIRÍA	23/06/2021	LUIS FERNANDEZ PACIOS (UPM)	Cuevas-Zuviría, B., Garrido-Arandia, M., Díaz-Perales, A., Pacios, L.F. 2019. Energy Landscapes of Ligand Motion Inside the Tunnel-Like Cavity of Lipid Transfer Proteins: The Case of the Pru p 3 Allergen. <i>International Journal of Molecular Sciences</i> 20, 1432. DOI: 10.3390/ijms20061432	IF: 5.923; Q1; citas:39 publicaciones
8	DIEGO REBAQUE MORÁN	23/06/2021	ANTONIO MOLINA, HUGO MÉLIDA (UPM)	Rebaque, D., Hierro, I. del, López, G., Bacete, L., Vilaplana, F., Dallabernardina, P., Pfrengle, F., Jordá, L., Sánchez-Vallet, A., Pérez, R., Brunner, F., Molina, A., Mélida, H. 2021. Cell wall-derived mixed-linked β -1,3/1,4-glucans trigger immune responses and disease resistance in plants. <i>The Plant Journal</i> . DOI: https://doi.org/10.1111/tpj.15185	IF: 6.417; Q1; citas:32 publicaciones;
9	JULIO TÉLLEZ DE PABLOS	26/06/2021	ANTONIO MOLINA, LUCIA JORDA (UPM)	Téllez, J., Muñoz-Barrios, A., Sopena-Torres, S., Martín-Forero, A.F., Ortega, A., Pérez, R., Sanz, Y., Borja, M., de Marcos, A., Nicolas, M., Jahrmann, T., Mena, M., Jordá, L., Molina, A. 2020. YODA Kinase Controls a Novel Immune Pathway of Tomato Conferring Enhanced Disease Resistance to the Bacterium <i>Pseudomonas syringae</i> . <i>Frontiers in Plant Science</i> 11, 1569. DOI: 10.3389/fpls.2020.584471	IF: 5.753; Q1; citas: 01 publicación
10	IRENE DEL HIERRO GARCÍA	28/06/2021	ANTONIO MOLINA, HUGO MÉLIDA (UPM)	Hierro, I. del, Mélida, H., Broyart, C., Santiago, J., Molina, A. 2020. Computational prediction method to decipher receptor-glycoligand interactions in plant immunity. <i>The Plant Journal</i> . DOI: https://doi.org/10.1111/tpl.15133	IF: 6.417; Q1; citas:24 publicaciones;

