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Formación

- Ingeniero Agrónomo (orientación Fitotecnia). 1984. Facultad de Agronomía, Universidad de Buenos Aires. Argentina.
- Magíster Scientiae (área Producción Vegetal). 1989. Facultad de Agronomía, Universidad de Buenos Aires. Argentina.
- Doctor of Philosophy. 1991. School of Biological Sciences. Faculty of Science, University of Southampton. Inglaterra.

Cargos

- Profesor Titular. Dedicación exclusiva. Cátedra de Cultivos Industriales. Departamento: Producción Vegetal. Facultad de Agronomía, Universidad de Buenos Aires. 2007 - presente.
- Coordinador Ejecutivo. Programa Producción Vegetal. Escuela para Graduados *Alberto Soriano*. Facultad de Agronomía, Universidad de Buenos Aires.
- Investigador Principal. CONICET.

Áreas de interés en investigación

- Fisiología Vegetal aplicada a la Agronomía.
- Ecofisiología de semillas.

Publicaciones (últimos 5 años)

Artículos y capítulos de libros:

- Batlla D and **Benech-Arnold RL** (2010) Predicting changes in dormancy level in natural seed soil banks. *Plant Molecular Biology* 73: 3-13.
- Mendiando GM, Leymarie J, Farrant J, Corbineau F and **Benech-Arnold RL** (2010) Differential expression of abscisic acid metabolism and signalling genes induced by seed-covering structures or hypoxia in barley (*Hordeum vulgare* L.) grains. *Seed Science Research* 20: 69-77.
- Huarte HR and **Benech-Arnold RL** (2010) Hormonal nature of seed responses to fluctuating temperatures in *Cynara cardunculus* (L.). *Seed Science Research* 20: 39-45.
- María Verónica Rodríguez, Guillermina Mendiando, Laura Maskin, Gustavo Gudesblat, Norberto Iusem, and **Roberto Benech-Arnold** (2009) Expression of ABA signalling genes and ABI5 protein levels in imbibed Sorghum bicolor caryopses with contrasting dormancy. *Annals of Botany* 104: 975-985.

- Danica E. Goggin¹, Kathryn J. Steadman, R. J. Neil Emery, Scott C. Farrow, **Roberto L. Benech-Arnold** and Stephen B. Powles (2009) ABA inhibits germination but not dormancy release in mature imbibed seeds of *Lolium rigidum* Gaud. *Journal of Experimental Botany* 60: 3387-3396.
- Gualano NA, **Benech-Arnold RL**. 2009. Predicting pre-harvest sprouting susceptibility in barley: Looking for "sensitivity windows" to temperature throughout grain filling in various commercial cultivars. *Field Crops Research* 114:35-44
- Gualano NA, **Benech-Arnold RL**. 2009. The effect of water and nitrogen availability during grain filling on the timing of dormancy release in malting barley crops. *Euphytica* 168:291-301
- Leymarie J, **Benech-Arnold RL**, Farrant JM, Corbineau F. 2009. Thermodormancy and ABA metabolism in barley grains. *Plant Signaling & Behavior* 4:205-207
- Leymarie J, Robayo-Romero ME, Gendreau E, **Benech-Arnold RL**, Corbineau F. 2008. Involvement of ABA in Induction of Secondary Dormancy in Barley (*Hordeum vulgare* L.) Seeds. *Plant Cell Physiology* 49:1830-1838
- Gendreau E, Romaniello S, Barad S, Leymarie J, **Benech-Arnold R**, Corbineau F. 2008. Regulation of cell cycle activity in the embryo of barley seeds during germination as related to grain hydration. *Journal of Experimental Botany* 59:203-212
- Bradford KJ, **Benech-Arnold RL**, Come D, Corbineau F. 2008. Quantifying the sensitivity of barley seed germination to oxygen, abscisic acid, and gibberellin using a population-based threshold model. *Journal of Experimental Botany* 59:335-347
- Batlla D, **Benech-Arnold RL**. 2007. Predicting changes in dormancy level in weed seed soil banks: implications for weed management. *Crop Protection* 26:189-197
- Gualano N, Carrari F, Rodríguez MV, Pérez-Flores L, Sánchez R, Iusem N, **Benech-Arnold RL**. 2007. Reduced embryo sensitivity to ABA in a sprouting-susceptible sorghum (*Sorghum bicolor*) variety is associated with an altered ABA signaling. *Seed Science Research* 17:81-90
- Windauer LB, Altuna A, **Benech-Arnold RL**. 2007. Hydrotime analysis of *Lesquerella fendleri* seed germination responses to priming treatments. *Industrial Crops and Products* 25:70-74
- Batlla D, Nicoletta M, **Benech-Arnold RL**. 2007. Sensitivity of *Polygonum aviculare* L. seeds to light as affected by soil moisture. *Annals of Botany* 99:915-924
- Allen PS, **Benech-Arnold RL**, Batlla D, Bradford KJ. 2007. Modeling of seed dormancy. En KJ Bradford y H Nonogaki (eds.) *Seed Development, Dormancy and Germination*. Blackwell Scientific Publications. pp 72-112
- Batlla D, **Benech-Arnold RL**. 2006. The role of fluctuations in soil water content on the regulation of dormancy changes in buried seeds of *Polygonum aviculare* L. *Seed Science Research* 16:47-59
- **Benech-Arnold RL**, Sánchez RA, Rodríguez MV. 2006. Hormone mutants. En JD Bewley, M Black y P Halmer (eds.) *Encyclopedia of Seeds. Science, Technology and Uses*. CAB International. Oxon, Wallingford, Reino Unido. pp. 339-340
- **Benech-Arnold RL**, Sánchez RA, Rodríguez MV. 2006. Development of seeds – hormone content. En JD Bewley, M Black y P Halmer (eds.) *Encyclopedia of Seeds. Science, Technology and Uses*. CAB International. Oxon, Wallingford, Reino Unido. pp. 156-161
- **Benech-Arnold RL**. 2006. Preharvest sprouting - mechanisms. En JD Bewley, M Black y P Halmer (eds.) *Encyclopedia of Seeds. Science, Technology and Uses*. CAB International. Oxon, Wallingford, Reino Unido. pp. 531-533
- **Benech-Arnold RL**. 2006. Preharvest sprouting - economic importance. En JD Bewley, M Black y P Halmer (eds.) *Encyclopedia of Seeds. Science, Technology and Uses*. CAB International. Oxon, Wallingford, Reino Unido. pp. 528
- **Benech-Arnold RL**. 2006. Preharvest sprouting. En JD Bewley, M Black y P Halmer (eds.) *Encyclopedia of Seeds. Science, Technology and Uses*. CAB International. Oxon, Wallingford, Reino Unido. pp. 527-528
- Gundel PE, Maseda P, Ghersa CM, **Benech-Arnold RL**. 2006. *Neotyphodium* endophyte

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- Kruk BC, Insausti P, Razul AP, **Benech-Arnold RL**. 2006. Light and thermal environment as modified by a wheat crop throughout its cycle and effects on weed seed germination. *Journal of Applied Ecology* 43:227-236
- **Benech-Arnold RL**, Gualano NA, Leymarie J, Come D, Corbineau F. 2006. Hypoxia interferes with ABA metabolism and increases ABA sensitivity in embryos of dormant barley grains. *Journal of Experimental Botany* 57:1423-1430
- Windauer LB, Slafer GA, Ravetta DA, **Benech-Arnold RL**. 2006. Environmental control of phenological development in two *Lesquerella* species. *Field Crops Research* 96:320-327
- Batlla D, **Benech-Arnold RL**. 2005. Changes in the light sensitivity of buried *Polygonum aviculare* seeds in relation to cold-induced dormancy loss: development of a predictive model. *New Phytologist* 165:445-452
- Huarte HR, **Benech-Arnold RL**. 2005. Fluctuating temperatures reduces mean base water potential for seed germination in several non - cultivated species. *Seed Science Research* 15:89-97
- Batlla D, **Benech-Arnold RL**. 2004. Weed Seed Dormancy: Implications for Weed Management Strategies. En *Encyclopedia of Pest Management* (ed. D. Pimentel). Marcel Dekker, Inc. DOI: 10.1081/E-EPM-120038043. pp. 1-4
- Batlla D, **Benech-Arnold RL**. 2004. A predictive model for dormancy loss in *Polygonum aviculare* L. seeds based on changes in population hydrotime parameters. *Seed Science Research* 14:277-286
- Batlla D, Kruk BC, **Benech-Arnold RL**. 2004. Modeling Changes in Dormancy in Weed Soil Seed Banks: Implications for the Prediction of Weed Emergence. En R Benech-Arnold y RA Sánchez (eds.) *Handbook of Seed Physiology: applications to agriculture*. Food Product Press, NY, USA. pp. 245-272
- **Benech-Arnold RL**. 2004. Inception, maintenance and termination of dormancy in grain crops. Physiology, genetics and environmental control. En R Benech-Arnold y RA Sánchez (eds.) *Handbook of Seed Physiology: applications to agriculture*. Food Product Press, NY, USA. pp. 169-198