

Dr Pietro P.M. Iannetta - Plant Functional Diversity

Full List of Peer Reviewed Publications

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4. Functional Trait Analyses: ethylene, plant cell walls & cell wall degrading enzymes 2

1. Monitoring Plant Diversity and Adaptive Evolution

Hawes C., Begg G.S., Squire G.R., Iannetta P.P.M. 2005. [Individuals as the basic accounting unit in studies of ecosystem function: functional diversity in *Capsella* \(shepherd's purse\)](#). **Oikos** **109**, 521-534.

Karley, A.J., Hawes, C., Iannetta, P.P.M. and Squire, G.R. 2008. [Intraspecific variation in *Capsella bursa-pastoris* in plant quality traits for insect herbivores](#). **Weed Research** **48**, 147-156.

Iannetta P.P.M., Begg, G., Hawes, C., Young M., Russell, J., Squire, G.R. 2007. [Variation in *Capsella* \(shepherd's purse\): an example of intra-specific functional diversity](#). **Physiologia Plantarum** **129**, 542-554.

Broadley, M.R., White, P.J., Hammond, J.P., Graham, N.S., Bowen, H.C., Emmerson, Z.F., Fray, R.G., Iannetta, P.P.M., McNicol, J.W., May, S.T. 2008. Evidence of [Evidence of neutral transcriptome evolution in plants](#). **New Phytologist** (in press).

2. Regulation of Nitrogen Fixation

Minchin, F.R., Iannetta, P.P.M., Fernandez-Pascual, M., De Lorenzo, C., Witty, J.F. and Sprent, J.I. 1992. [A new procedure for the calculation of oxygen diffusion resistance in legume nodules from flow-through gas analysis data](#). **Annals of Botany** **70**, 283-289.

Iannetta, P.P.M., James, E.K., McHardy, P., Sprent, J.I. and Minchin, F.R. 1993. [An ELISA procedure for quantification of relative amounts of intercellular glycoprotein in legume nodules](#). **Annals of Botany** **71**, 85-90.

Iannetta, P.P.M., De Lorenzo, C., James, E.K., Fernandez-Pascual, M., Sprent, J.I., Lucas, M.M., Witty, J.F., De Felipe, M.R. and Minchin, F.R. 1993. [Oxygen diffusion in lupin nodules. I. visualisation of diffusion barrier operation](#). **Journal of Experimental Botany** **44**, 1461-67.

De Lorenzo, C., Iannetta P.P.M., Fernandez-Pascual, M., James, E.K., Lucas, M.M. Sprent, J.I., de Felipe, M.R., Witty, J.F. and Minchin, F.R. 1993. [Oxygen diffusion in lupin nodules. II. mechanisms of diffusion barrier operation](#). **Journal of Experimental Botany** **44**, 1469-74.

James, E.K., Iannetta, P.P.M., Naisbitt, T., Goi, S.R., Sutherland, J.M., Sprent, J.I., Minchin, F.R. and Brewin, N.J. 1994. A survey of N₂-fixing nodules in the Leguminosae: with particular reference to intercellular glycoproteins and the control of oxygen diffusion. **The Royal Society of Edinburgh (B)** **102**, 429-32.

Iannetta, P.P.M., James, E.K., Sprent, J.I. and Minchin, F.R. 1995. [Time-course of changes involved in the operation of the oxygen diffusion barrier in white lupin nodules](#). **Journal of Experimental Botany** **46**, 565-575.

James, E.K., **Iannetta, P.P.M.**, Nixon, P.J., Whiston, A.J., Peat, L., Crawford, R.M.M., Sprent, J.I. and Brewin, N.J. 1996. [Photosystem II and oxygen regulation in *Sesbania rostrata* stem nodules](#). **Plant Cell and Environment** **19**, 895-910.

James, E.K., Minchin, F.R., **Iannetta, P.P.M.** and Sprent, J.I. 1997. [Temporal relationships between nitrogenase and intercellular glycoprotein in developing white lupin nodules](#). **Annals of Botany** **79**, 493-503.

James, E.K., **Iannetta, P.P.M.**, Deeks, L., Sprent, J.I. and Minchin, F.R. 2000. [Detopping causes production of intercellular occlusions in both the cortex and infected region of soybean nodules](#). **Plant Cell and Environment** **23**, 377-386.

James, E.K., Gyaneshwar, P., Mathan, N., Barraquio, W.L., Reddy, P.M., **Iannetta, P.P.M.**, Olivares, F.L. and Jagdish, K.L. 2002. [Infection and colonisation of rice seedlings by the plant growth promoting bacterium *Herbaspirillum seropedicae* Z67](#). **Molecular Plant Microbe Interactions** **15**, 894-906.

3. Monitoring GM Crop Contamination and Persistence

Begg G.S., Cullen, D.W., **Iannetta, P.P.M.**, Squire, G.R. 2007. [Sources of uncertainty in the quantification of genetically modified oilseed rape contamination in seed lots](#). **Transgenic Research** **16**, 51-63.

Begg, G., Elliot, M., Cullen, D., **Iannetta, P.P.M.**, Squire, G.R. 2008. [Heterogeneity in the distribution of genetically modified and conventional oilseed rape within fields and seed lots](#). **Transgenic Research** (submitted).

4. Functional Trait Analyses: ethylene, plant cell walls & cell wall degrading enzymes

Jones, C.S., **Iannetta, P.P.M.**, Woodhead, M., Davies, H.V., McNicol, R.J. and Taylor, M.A. 1997. [The isolation of RNA from raspberry \(*Rubus idaeus*\) fruit](#). **Molecular Biotechnology** **8**, 219-221.

Ramanathan, V., Simpson, C.G., Thow, G., **Iannetta, P.P.M.**, Johnston, D.J., Graham, J., McNicol, R.J. and Williamson, B. 1997. [cDNA cloning and expression of polygalacturonase-inhibiting protein \(PGIP\) from red raspberry \(*Rubus idaeus*\)](#). **Journal of Experimental Botany** **48**, 1185-1193.

Iannetta, P.P.M., McMillan, G.P. and Sprent, J.I. 1997. [Plant cell wall degrading enzymes of *Rhizobium leguminosarum* bv. *viciae*: potential for host-plant-defence avoidance](#). **Soil Biology and Biochemistry** **29**, 1019-1021.

Iannetta, P.P.M. and Fry, S.C. 1999.) [Visualization of the activity of xyloglucan endotransglycosylase \(XET\) isoenzymes after gel electrophoresis](#). **Phytochemical Analysis** **10**, 238-240.

Iannetta, P.P.M., Van den Berg, J., Wheatley, R.E., McNicol, R.J. and Davies, H.V. 1999. The role of ethylene and cell wall modifying enzymes in raspberry (*Rubus idaeus*) fruit ripening. **Physiologia Plantarum** **105**, 338-347.

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Iannetta, P.P.M., Wyman, M., Neelam, A., Jones, C., Davies, H.V and Sexton, R. 2000. [A causal role for ethylene and endo-b-1,4-glucanase in the abscission of red-raspberry \(*Rubus idaeus* L.\) drupelets](#). **Physiologia Plantarum** **110**, 535-543.

Stewart, D., **Iannetta, P.P.M.** and Davies, H.V. 2001. [Ripening-related changes in raspberry cell wall composition and structure](#). **Phytochemistry** **56**, 423-428.

Castillejo, C., Delafuente, J.I., **Iannetta, P.P.M.**, Botella, M.A., Valpuesta, V. 2004. [Pectin esterase gene family in strawberry fruit. Study of FaPE1, a ripening-specific isoform](#). **Journal of Experimental Botany** **55**, 909-918.

Iannetta P.P.M., Medina Escobar, N., Ross, H.A., Souleyre, E.J.F., Hancock, R.D., Peter Witte, C.P., Davies, H.V. 2004. [Identification, cloning and expression analysis of strawberry \(*Fragaria x ananassa*\) mitochondrial citrate synthase and mitochondrial malate dehydrogenase](#). **Physiologia Plantarum** **121**, 15-26.

Souleyre, E.J.F., Taylor, M., **Iannetta, P.P.M.**, Ross, H.A., Shepherd, L.V.T., Hancock, R., Viola, R. and Davies, H.V. 2004. [Starch metabolism in ripening strawberry fruit](#). **Physiologia Plantarum** **121**, 369-376.

Iannetta P.P.M., Laarhoven L-J, Medina-Escobar N., James E.K., McManus M.T. Davies H.V., Harren F.J.M. 2006. [Ethylene and carbon dioxide production by developing strawberries show a correlative pattern that is indicative of ripening climacteric fruit](#). **Physiologia Plantarum** **127**, 247-259.