

Prof. Dariusz Grzebelus



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Consultation hours: Thu, 13:00-15:00

Research interest:

- plant genomics
- transposable elements
- crop improvement

Research experience:

Visiting Scholar

Wye College, University of London, UK, 1992 (6 months)

Centre for Plant Breeding and Reproduction Research (CPRO-DLO), Wageningen, the Netherlands, 1993 (5 months)

Dept. of Horticulture, University of Wisconsin, Madison, USA, 1998 (3 months), 2001/2002 (11 months), 2004 (6 months), 2010/2011 (3 months)

Institut National d'Horticulture, Angers, France, 2000 (6 months)

Federal Centre for Breeding Research on Cultivated Plants (BAZ), Institute of Horticultural Crops, Quedlinburg, Germany, 2005 (2 months)

Diversity Arrays Technology P/L, Yarralumla, Australia, 2010 (2 months)

DSc, (Habilitation) 2009, Development of molecular markers facilitating genetic improvement of carrot (*Daucus carota* L.)

PhD, 1996, The effect of genetic and environmental factors on nitrate content in the roots of table beet

MSc, 1991, **MSc dissertation**: Studies on susceptibility of carrot cultivars to soft rot in field and laboratory assays

Professional profiles:

ORCID: <http://orcid.org/0000-0001-6999-913X>

Research ID: <http://www.researcherid.com/rid/I-8832-2014>

Mendeley: <https://www.mendeley.com/profiles/dariusz-grzebelus/>

Research Gate: https://www.researchgate.net/profile/Dariusz_Grzebelus

Academia: [https://agh.academia.edu/...](https://agh.academia.edu/)

Google Scholar: <http://scholar.google.com/citations?user=dauhxxMAAAAJ&hl=pl&oi=ao>

LinkedIn: <https://www.linkedin.com/in/...>

List of publications:

1. Iorizzo M., Ellison S., Senalik D., Zeng P., Satapoomin P., Huang J., Bowman M., Iovene M., Sanseverino W., Cavagnaro P., Yildiz M., Macko-Podgórní A., Moranska E., Grzebelus E., **Grzebelus D.**, Ashrafi H., Zheng Z., Cheng S., Spooner D., Van Deynze A., Simon P. 2016. A high-quality carrot genome assembly provides new insights into carotenoid accumulation and asterid genome evolution. **Nature Genet.** 48: 657-666.
2. Nowicka A., Grzebelus E., **Grzebelus D.** 2016. Precise karyotyping of carrot mitotic chromosomes using multicolour-FISH with repetitive DNA. **Biologia Plantarum** 60: 25-36.
3. Nowicka A., Sliwinska E., **Grzebelus D.**, Baranski R., Simon P.W., Nothnagel T., Grzebelus E. 2016. Nuclear DNA content variation within the genus *Daucus* (Apiaceae) determined by flow cytometry. **Scientia Horticulturae** 209: 132-138.
4. Startek M.P., Nogly J., Gromadka A., **Grzebelus D.**, Gambin A. 2017. Inferring transposons activity chronology by TRANScendence – TEs database and de-novo mining tool. **BMC Bioinformatics** 18: 422.
5. Macko-Podgórní A., Machaj G., Stelmach K., Senalik D., Grzebelus E., Iorizzo M., Simon P.W., **Grzebelus D.** 2017. Characterization of a genomic region under selection in cultivated carrot (*Daucus carota* subsp. *sativus*) reveals a candidate domestication gene. **Front. Plant Sci.** 8: 12.
6. Stelmach K., Macko-Podgórní A., Machaj G., **Grzebelus D.** 2017. Miniature inverted repeat transposable element insertions provide a source of intron length polymorphism markers in the carrot (*Daucus carota* L.). **Front. Plant Sci.** 8: 725.
7. **Grzebelus D.** 2018. The functional impact of transposable elements on the diversity of plant genomes. **Diversity** 10: 18.
8. Machaj G., Bostan H., Macko-Podgórní A., Iorizzo M., **Grzebelus D.** 2018. Comparative transcriptomics of root development in wild and cultivated carrots. **Genes** 9:431.
9. Macko-Podgórní A., Stelmach K., Kwolek K., **Grzebelus D.** 2019. Stowaway miniature inverted repeat transposable elements are important agents driving recent genomic diversity in wild and cultivated carrot. **Mobile DNA** 10:47.

10. P.W. Simon, M. Iorizzo, **D. Grzebelus**, R. Barański (eds.) 2019. The Carrot Genome. Compendium of Plant Genomes. C. Cole (series ed.), Springer Nature Switzerland [book]