

Diversity of allochthonous substances detected in bee pollen pellets

Marek Kolenčík, Peter Štrba, Gabriela Kratošová, Illa Ramakanth

References

- ALMEIDA-MURADIAN, L.B. et al. (2005) Chemical composition and botanical evaluation of dried bee pollen pellets. In *Journal of Food Composition and Analysis*, vol. 18, pp. 105–111.
- CAMPOS, M.G.R. et al. (2008) Pollen composition and standardisation of analytical methods. In *Journal of Apicultural Research*, vol. 47, no. 2, pp. 154–161.
- CHAUZAT, M.P. et al. (2006) A Survey of Pesticide Residues in Pollen Loads Collected by Honey Bees in France. In *Journal of Economic Entomology*, vol. 99, no. 2, pp. 253–262.
- ČURLÍK, J. (2011) Potentially toxic microelements and their distribution in soils of Slovakia. Bratislava: Suma print (in Slovak).
- DE OLIVEIRA, R. C. et al. (2016) Bee pollen as a bioindicator of environmental pesticide contamination. In *Chemosphere*, vol. 163, pp. 525–534.
- ESTEVINHO, L.M. et al. (2012) Portuguese bee pollen: Palynological study, nutritional and microbiological evaluation. In *International Journal of Food Science and Technology*, vol. 47, pp. 429–435.
- FUTÁK, J. (1984) Phytogeographical division of Slovakia. In *Flóra Slovenska IV/1*. Bratislava: Veda, pp. 418–419 (in Slovak).
- HOODA, P.S. et al. (2004) The potential impact of soil ingestion on human mineral nutrition. In *Science of The Total Environment*, vol. 333, pp. 75–87.
- KAČÁNIOVÁ, M. et al. (2004) Microflora of the honeybee gastrointestinal tract. In *Folia Microbiologica*, vol., 49, no. 2, pp. 169–171.
- KAČÁNIOVÁ, M. et al. (2011) Mycobiota and mycotoxins in bee pollen collected from different areas of Slovakia. In *Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes*, vol. 46, pp. 623–629.
- KIM, H., SUH, D.W. and KIM, N.J. (2013) Fe-Al-Mn-C lightweight structural alloys: A review on the microstructures and mechanical properties. In *Science and Technology of Advanced Materials*, vol. 14, pp. 1–12.
- KLIMKO, M., KLUZA, M. and KREFT, A. (2000) Morphology of pollen grains in three varieties of *Helianthus annuus* L. In *Roczniki Akademii Rolniczej w Poznaniu CCCXXII Botanika*, vol. 3, pp. 135–142.
- KNOX, R.B. et al. (1997) Major grass pollen allergen Lol p 1 binds to diesel exhaust particles: Implications for asthma and air pollution. In *Clinical and Experimental Allergy*, vol. 27, pp. 246–251.
- KONVIČKOVÁ, Z. et al. (2016) Antimicrobial bionanocomposite—from precursors to the functional material in one simple step. In *Journal of nanoparticle research*, vol. 18, pp. 368.
- KOŘENKOVÁ, L. et al. (2017) Physiological response of culture media-grown barley (*Hordeum vulgare* L.) to titanium oxide nanoparticles. In *Acta Agriculturae Scandinavica Section B: Soil and Plant Science*, vol. 67, pp. 285–291.
- LIN, H., GOMEZ, I. and MEREDITH, J.C. (2013) Pollenkitt wetting mechanism enables species-specific tunable pollen adhesion. In *Langmuir*, vol. 29, pp. 3012–3023.
- LINSKENS, H.F. and JORDE, W. (1997) Pollen as food and medicine - A review. In *Economic Botany*, vol. 51, no. 1, pp. 78–86.
- MĂRGĂOAN, R. et al. (2010) Bee collected pollen—General aspects and chemical composition. In *Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Animal Science and Biotechnologies*, vol. 67, no. (1-2), pp. 254–259.

- MIKLÓS, L. et al. (2002) *Landscape atlas of the Slovak Republic*. Bratislava: Ministerstvo životného prostredia SR.
- NOGUEIRA, C. et al. (2012) Commercial bee pollen with different geographical origins: A comprehensive approach. In *International Journal of Molecular Sciences*, vol. 13, pp. 11173–11187.
- ORMSTAD, H., JOHANSEN, B.V. and GAARDER, P.I. (1998) Airborne house dust particles and diesel exhaust particles as allergen carriers. In *Clinical and Experimental Allergy*, vol. 28, pp. 702–708.
- PUNT, W. et al. (2007) Glossary of pollen and spore terminology. In *Review of Palaeobotany and Palynology*, vol. 143, pp. 1–81.
- RUBY, M.V. et al. (1999) Advances in evaluating the oral bioavailability of inorganics in soil for use in human health risk assessment. In *Environmental Science and Technology*, vol. 33, pp. 3697–3705.
- SCHULTE, F. et al. (2008) Chemical characterization and classification of pollen. In *Analytical Chemistry*, vol. 80, pp. 9551–9556.
- SCHULZ, S. et al. (2000) Composition of lipids from sunflower pollen (*Helianthus annuus*). In *Phytochemistry*, vol. 54, pp. 325–336.
- ŠTRBA, P. and KOSÁR, G. (2012) Diversity of vascular plants in agricultural landscape of central part of Žitný ostrov region. In *Biodiversity in agricultural landscape and ecosystem. International conference of the project REVERSE-INTERREG IVC. Piešťany: 13th of June 2012*. Piešťany: Centre of Plant Production Piešťany, pp. 13–16 (in Slovak).
- VILLANUEVA, M.T.O. et al. (2002) The importance of bee-collected pollen in the diet: A study of its composition. In *International Journal of Food Sciences and Nutrition*, vol. 53, pp. 217–224.