Recommended Scientific Articles

- Topics -

Bee Breeding / Varroa Resistance / Viruses / Hygienic Behavior / Misc

Bee Breeding

Plate, M., Bernstein, R., Hoppe, A. *et al.* **The importance of controlled mating in honeybee breeding.** *Genet Sel Evol* 51, 74 (2019). https://doi.org/10.1186/s12711-019-0518-y

Brascamp, E.W., Bijma, P. **Methods to estimate breeding values in honey bees.** *Genet Sel Evol* 46, 53 (2014). https://doi.org/10.1186/s12711-014-0053-9

Bubnič, J.; Mole, K.; Prešern, J.; Moškrič, A. **Non-Destructive Genotyping of Honeybee Queens to Support Selection and Breeding.** *Insects* **2020**, *11*, 896. https://doi.org/10.3390/insects11120896

Miriam Bixby, Kathy Baylis, Shelley E. Hoover, Rob W. Currie, Andony P. Melathopoulos, Stephen F. Pernal, Leonard J. Foster, M. Marta Guarna, **A Bio-Economic Case Study of Canadian Honey Bee (Hymenoptera: Apidae) Colonies: Marker-Assisted Selection (MAS) in Queen Breeding Affects Beekeeper Profits,** *Journal of Economic Entomology*, Volume 110, Issue 3, June 2017, Pages 816–825, https://doi.org/10.1093/jee/tox077

Miriam Bixby, Shelley E Hoover, Robyn McCallum, Abdullah Ibrahim, Lynae Ovinge, Sawyer Olmstead, Stephen F Pernal, Amro Zayed, Leonard J Foster, M Marta Guarna, **Honey Bee Queen Production: Canadian Costing Case Study and Profitability Analysis,** *Journal of Economic Entomology*, Volume 113, Issue 4, August 2020, Pages 1618–1627, https://doi.org/10.1093/jee/toaa102

Plate, M.; Bernstein, R.; Hoppe, A.; Bienefeld, K. **Long-Term Evaluation of Breeding Scheme Alternatives for Endangered Honeybee Subspecies.** *Insects* **2020** https://doi.org/10.3390/insects11070404

Maucourt, S.; Fortin, F.; Robert, C.; Giovenazzo, P. **Genetic Parameters of Honey Bee Colonies Traits in a Canadian Selection Program.** *Insects* 2020, *11*, 587. https://doi.org/10.3390/insects11090587

Bernstein, R., Du, M., Hoppe, A. *et al.* **Simulation studies to optimize genomic selection in honey bees.** *Genet Sel Evol* 53, 64 (2021). https://doi.org/10.1186/s12711-021-00654-x

Du, M., Bernstein, R., Hoppe, A. *et al.* **A theoretical derivation of response to selection with and without controlled mating in honeybees.** *Genet Sel Evol* 53, 17 (2021).
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Bilodeau L. **Genetic Diversity and Structure in a Closed Breeding System of Russian Honey Bees.** J Econ Entomol. 2022 Jan 25
https://doi.org/10.1093/jee/toab266

Varroa Resistance

Van Alphen, J.J.M., Fernhout, B.J. **Natural selection, selective breeding, and the evolution of resistance of honeybees (Apis Mellifera) against Varroa.** Zoological Lett 6, 6 (2020).
https://doi.org/10.1186/s40851-020-00158-4

Matthieu Guichard, Markus Neuditschko, Padruot Fried, Gabriele Soland & Benjamin Dainat. **A future resistance breeding strategy against *Varroa destructor* in a small population of the dark honey bee.** Journal of Apicultural Research, 58:5, 814-823 (2019)
https://doi.org/10.1080/00218839.2019.1654966

Mondet F, Beaurepaire A, McAfee A, Locke B, Alaux C, Blanchard S, Danka B, Le Conte Y. **Honey bee survival mechanisms against the parasite Varroa destructor: a systematic review of phenotypic and genomic research efforts.** Int J Parasitol; 50(6-7):433-447 (2020).
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De la Mora, A.; Emsen, B.; Morfin, N.; Borges, D.; Eccles, L.; Kelly, P.G.; Goodwin, P.H.; Guzman-Novoa, E. **Selective Breeding for Low and High *Varroa destructor* Growth in Honey Bee (*Apis mellifera*) Colonies: Initial Results of Two Generations.** *Insects* **2020**, *11*, 864.
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Masaquiza, D.; Vargas, J.; Ortíz, N.; Salazar, R.; Curbelo, L.; Pérez, A.; Arenal, A. **Hygienic Behavior of *Apis mellifera* and Its Relationship with *Varroa destructor***

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Guichard, M.; Droz, B.; Brascamp, E.W.; von Virag, A.; Neuditschko, M.; Dainat, B. **Exploring Two Honey Bee Traits for Improving Resistance Against *Varroa destructor*: Development and Genetic Evaluation.** *Insects* 2021, *12*, 216.
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Viruses

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Hygienic Behavior

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Miscellaneous

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