**JOSHUA DAVID KLEIN**

Department of Natural Resources, Institute of Plant Sciences

ARO-Volcani Center Rishon LeZion, Israel e-mail: vcjosh@volcani.agri.gov.il

Google Scholar web –site: [Joshua D. Klein - Google Scholar Citations](http://scholar.google.com/citations?hl=en&user=2WiFp3oAAAAJ&sortby=pubdate&view_op=list_works&is_public_preview=1)

Rank A (Equivalent to “Professor”(

University Education and Additional Training

|  |  |
| --- | --- |
| **Dates** | **Description** |
| 1973-1977 | B.Sc. in Agricultural Science at Cornell University, Ithaca, New York |
| 1977-1979 | M.Sc. in Plant Nutrition at The Pennsylvania State University  |
| 1979-1983 | Ph.D. in Postharvest Physiology at Michigan State University  |
| 1986-1988 | Postdoctoral position at ARO-Volcani Center with Prof. Ruth Ben-Arie |
| 1994-1995 | Sabbatical leave at US Department of Agriculture, Beltsville, Maryland (9/94-3/95) Sabbatical leave at University of California, Davis (4/95-8/95)  |
| 2001-2002 | Sabbatical leave at Cornell University, NY State Agricultural Experiment Station, Geneva, NY (4-8/01) Sabbatical leave Plant Research International, Wageningen, Netherlands (4-8/02)  |
| 2006-2008 | Sabbatical leave at University of Kentucky, Lexington, Kentucky (4-8/06) Sabbatical leave at CSIRO, Canberra Australia (4-8/08)  |
| 2001 | EU Mobility Grant Katholiek University of Nijmegen, Netherlands (2 months) |
| 2004 | Royal Society Short-term Fellowship University of Aberdeen, Scotland (2 weeks) |
| 2014-2015 | EPPN Transnational Access Fellowship (EU) INRA, Dijon, France (4 months total) |
| Other international grants  | Binational Agricultural Research and Development Fund (USA,1990-2\*; 1993-5); GIARA (Thailand, 2002-05\*); MERC (Jordan; 2015-19\*; 2021-2025\*)\*=Principal Investigator |

***Scientific publications***

Gorelick, J., ...., **Klein, J. D.**, and Ben-Shabat, S. (2017). Impact of diet wheat source on the onset of type 1 diabetes mellitus—lessons learned from the non-obese diabetic (NOD) mouse model. *Nutrients* 9:482-485

**Klein, J. D.,** Shalev, Y. R., Cohen, S., and Sachs, M. (2017). Rootstocks for the grapefruit hybrid “Sweetie”(‘Oroblanco’) under organic and conventional management. *Scientia Horticulturae* 222:12-16

**Klein, J.D**., Firmansyah, A., Panga, Y., Abu-Aklin, W., ….Dudai,N., Mazor,L. (2017) Seed treatments with essential oils protect radish seedlings against drought. *AIMS Agriculture and Food*  2:345-353

Ginzburg, D. and **Klein, J.D.,** (2019) Seed osmolyte priming and abiotic stress tolerance. In Hossain, M. and Mäkelä, P., eds. Osmoprotectant-mediated abiotic stress tolerance in plants Springer, (pp. 257-267).

Ginzburg, D. and **JD Klein**. (2020) LED pre-exposure shines a new light on drought tolerance complexity in leafy greens. Experimental and Environmental Botany *180*, p.104240.

Michael, T.E.B., Rozenblat, L., Faigenboim, A., Shemesh-Mayer, E., Forer, I., Peters, R., **Klein, J.D.,** Rabinowitch, H.D. and Goldstein, R.K., (2020) From embryo to adult: low temperatures affect phase transitions of Allium sativum l. from germination to flowering. *Agronomy*, *10*(11), p.1651.

Avtabi, A. and **Klein, J.D.,** (2023) Selected aspects of commercial production in etrog orchards. In *The Citron Compendium: The Citron (Etrog) Citrus medica L.: Science and Tradition* (pp. 73-89). Cham: Springer International Publishing.

**Klein, J.D.,** Raz-Shalev, Y., Cohen, S. and Fallik, E., 2023. Preserving etrog quality after harvest: Doctrine and practice. In *The Citron Compendium: The Citron (Etrog) Citrus medica L.: Science and Tradition* (pp. 91-104). Cham: Springer International Publishing.

Muklada, H., **Klein, J.D.,** Glasser, T.A., Dvash, L., Azaizeh, H., Halabi, N., Davidovich-Rikanati, R., Lewinsohn, E. and Landau, S.Y., 2018. Initial evaluation of willow (Salix acmophylla) irrigated with treated wastewater as a fodder crop for dairy goats. *Small Ruminant Research*, *163*, pp.76-83.

Muklada, H., Voet, H., Deutch, T., Zachut, M., Kra, G., Blum, S.E., Krifuks, O., Glasser, T.A., **Klein, J.D.,** Davidovich-Rikanati, R. and Lewinsohn, E., 2020. The effect of willow fodder feeding on immune cell populations in the blood and milk of late-lactating dairy goats. *Animal*, *14*(12), pp.2511-2522.

Muklada, H., Voet, H., Deutch, T., Zachut, M., Kra, G., Blum, S.E., Krifuks, O., Glasser, T.A., **Klein, J.D.,** Davidovich-Rikanati, R. and Lewinsohn, E., 2020. The effect of willow fodder feeding on immune cell populations in the blood and milk of late-lactating dairy goats. *Animal*, *14*(12), pp.2511-2522.

Muklada, H., Davidovich-Rikanati, R., Wilkerson, D.G., **Klein, J.D.,** Deutch-Traubman, T., Zou, J., Awabdeh, S., Sweidan, R., Landau, S.Y., Schwartz, A. and Lewinsohn, E., 2020. Genotypic diversity in willow (Salix spp.) is associated with chemical and morphological polymorphism, suggesting human-assisted dissemination in the Eastern Mediterranean. *Biochemical Systematics and Ecology*, *91*, p.104081.

Awwad, S.; Markovics, A.; Halahlih, F.; Yazbak, A.; Haj-Zaroubi, M.; Muklada, H.; **Klein, J.D**.; Azaizeh, H. (2021) Effect of irrigation water source on secondary metabolites in Salix acmophylla and their potential to impair exsheathment of gastro-intestinal nematodes. Ann. Agric. Crop Sci. 6:1079

Capuana, M., Nissim, W.G. and **Klein, J.D.,** 2022. Protocol for in vitro propagation of Salix acmophylla (Boiss.).Studies on three ecotypes. *Forests*, *13*(7), p.1124.

Muklada, H., Schwartz, A., Davidovich-Rikanati, R., **Klein, J.D.,** Deutch-Traubman, T., Voet, H., Lewinsohn, E. and Landau, S.Y., 2022. Effect of water quality on the biomass production, nutritional value, and contents of secondary compounds of three genotypes of willow (Salix acmophylla Boiss.) grown for fodder. *Animal Feed Science and Technology*, *293*, p.115424.

Palm, E**., Klein, J.D.,** Mancuso, S. and Guidi Nissim, W., 2022. The physiological response of different brook willow (Salix acmophylla Boiss.) ecotypes to salinity. *Plants*, *11*(6), p.739.

Landau, S.Y., Glasser, T.A., Zachut, M., **Klein, J.D.,** Deutch-Traubman, T., Voet, H., Kra, G. and Davidovich-Rikanati, R., 2023. Milking performance and plant specialized metabolites in the milk of goats fed silage from willow (Salix acmophylla) irrigated with saline water. *Livestock Science*, *270*, p.105205.

Haj-Zaroubi, M., Mattar, N., Awabdeh, S., Sweidan, R., Markovics, A., **Klein, J.D**. and Azaizeh, H., 2024. Willow (Salix acmophylla Boiss.) Leaf and branch extracts inhibit in vitro sporulation of coccidia (Eimeria spp.) from goats. *Agriculture*, *14*(5), p.648.