



César Gemeno

Associate professor (no tenured)

Personal Information



Position: Associate professor (no tenured)

Area of expertise: Entomology

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University degrees

- BS Biology, Universidad Complutense de Madrid, 1988
- MSc, University of Kentucky, 1992
- Ph.D. Entomology, University of Kentucky, 1997

Previous activities

- 1997 – 1999. , University of Kentucky, Department of Entomology.
- 1999 – 2002. Postdoc, North Carolina State University, Department of Entomology.
- 05/2002 – 05/2007. Ramón y Cajal Researcher, Universitat de Lleida (UdL)
- 05/2007-11/2007. Researcher, UdL
- 11/2007-Present. Associated Professor, UdL

Research



· Insect behavior, chemical ecology and neuroethology.
· Tortricid fruit pests.

Teaching

· FOREST HEALTH

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Recent Publications

Eliyahu, D., Nojima, S., Santangelo, R.G., Carpenter, S., Webster, F. X., Kiemlec, D.J., **Gemeno, C.**, Leal, W.S., and Schal, C. 2012. Unusual macrocyclic lactone sex pheromone of *Parcoblatta lata*, a primary food source of the endangered red-cockaded woodpecker. *Proceedings of the National Academy of Sciences* 109: E490-E496.

Guerrieri, F., **Gemeno, C.**, Monsempes, C., Anton, S., Jacquín-Joly, E., Lucas, P., and Devaud, J.-M. 2012. Experience-dependent modulation of antennal sensitivity and input to antennal lobes in male moths pre-exposed to sex pheromone. *Journal of Experimental Biology* 215: 2334-2341.

Gemeno, C., Laserna, N., Riba, M., Castañé, C., and Alomar, O. 2012. Cuticular hydrocarbons discriminate isomorphic *Macrolophus* species. *Bulletin of Entomological Research* 102: 624-631.

Dumenil, C., Judd, G., Bosch, D., Baldessari, M., **Gemeno, C.**, and Groot, A.T. 2014. Intraspecific variation in female sex pheromone of the codling moth *Cydia pomonella*. *Insects* 7:705-721

Ammagarahalli, B., and **Gemeno, C.** 2014. Response profile of pheromone receptor neurons in male *Grapholita molesta* (Lepidoptera : Tortricidae). *Journal of Insect Physiology* 71: 128-16 (doi:10.1016/j.jinsphys.2014.10.011)

Ammagarahalli, B., and **Gemeno, C.** 2015. Interference of plant volatiles on pheromone receptor neurons of male *Grapholita molesta* (Lepidoptera: Tortricidae). *Journal of Insect Physiology* 81:118-128

Knight, A.L., Barros-Parada, W., Bosch, D., Escudero-Colomar, L.A., Fuentes-Contreras, E., Hernández-Sánchez, J., Yung, C., Kim, Y., Kovanci, O.B., Levi, A., Lo, P., Molinari, F., Valls, J., and **Gemeno, C.** 2015. Similar worldwide patterns in the sex pheromone signal and response in the oriental fruit moth, *Grapholita molesta* (Lepidoptera: Tortricidae). *Bulletin of Entomological Research* 105: 23-31 (doi: 10.1017/S0007485314000637)

Gemeno, C., Baldo, G., Rachele, N., Valls, J., Alomar, O., and Mazzoni, V. 2015. Substrate-borne vibrational signals in mating communication of *Macrolophus* bugs. *Journal Insect Behavior* 28:482-498

Álvarez, G., Ammagarahalli, B., Hall, D.R., Pajares, J., and **Gemeno, C.** 2015. Smoke, pheromone, and kairomone olfactory receptor neurons in males and females of the pine sawyer *Monochamus galloprovincialis* (Olivier) (Coleoptera: Cerambycidae). *Journal of Insect Physiology* 82:46-55



Sans, A., Morán, M., Riba, M., Guerrero, Á., Roig, J., & **Gemeno, C.** 2016. Plant volatiles challenge inhibition by structural analogs of the sex pheromone in *Lobesia botrana* (Lepidoptera: Tortricidae). *European Journal of Entomology*, 113(1), 579-586.

Ammagarahalli, B., Chianella, L., Gomes, P., and **Gemeno, C.** 2017. Role of plant volatiles and hetero-specific pheromone components in the wind tunnel response of male *Grapholita molesta* (Lepidoptera: Tortricidae) to modified sex pheromone blends. *Bulletin of Entomological Research*, 1-10.

Navarro-Roldán, M.A., Avilla, J., Bosch, D., Valls, J., and **Gemeno, C.** 2017. Comparative effect of three neurotoxic insecticides with different modes of action on adult males and females of three tortricid moth pests. *Journal of Economic Entomology* Apr 11. doi: 10.1093/jee/tox113. [Epub ahead of print]

Navarro-Roldán, M.A., and **Gemeno, C.** 2017. Sublethal effects of neonicotinoid insecticide on calling behavior and pheromone production of tortricid moths. *Journal of Chemical Ecology* 43: 881-890. doi:10.1007/s10886-017-0883-3

Barros-Parada, W., Ammagarahalli, B., Basoalto, E., Fuentes-Contreras, E., and **Gemeno, C.** 2018. Captures of oriental fruit moth, *Grapholita molesta* (Lepidoptera: Tortricidae), in traps baited with host-plant volatiles in Chile. *Applied Entomology and Zoology* 53: 193-204 doi.org/10.1007/s13355-017-0543-7 (https://link.springer.com/article/10.1007/s13355-017-0543-7?wt_mc=Internal.Event.1.SEM.ArticleAuthorAssigned [https://link.springer.com/article/10.1007/s13355-017-0543-7?wt_mc=Internal.Event.1.SEM.ArticleAuthorAssigned])

El-Sayed, A. M., Sporle, A., Gemeno, C., Jósvali, J. K., Simmons, G. S., & Suckling, D. M. (2019). Leafroller-induced phenylacetonitrile and acetic acid attract adult *Lobesia botrana* in European vineyards. *Zeitschrift für Naturforschung C*, 74(5-6), 161-165. <https://doi.org/10.1515/znc-2018-0163> [<https://doi.org/10.1515/znc-2018-0163>]

Navarro-Roldán, M.A, Bosch, D., **Gemeno, C.**, Siegwart, M. 2019. Enzymatic detoxification strategies for neurotoxic insecticides in adults of three tortricid pests. *Bulletin of Entomological Research*.110(1), 144-154. <https://doi.org/10.1017/S0007485319000415> [<https://doi.org/10.1017/S0007485319000415>]

Navarro-Roldán, M.A., Amat, C., Bau, P. and **Gemeno, C.** 2019. Extremely low neonicotinoid doses alter navigation of pest insects along pheromone plumes. *Scientific Reports*. 9(1):8150. <https://doi.org/10.1038/s41598-019-44581-w> [<https://doi.org/10.1038/s41598-019-44581-w>]

Pérez-Aparicio, A., Torres-Vila, L. M., & **Gemeno, C.** (2019). EAG responses of adult *Lobesia botrana* males and females collected from *Vitis vinifera* and *Daphne gnidium* to larval host-plant volatiles and sex pheromone. *Insects*, 10(9), 281. <https://doi.org/10.3390/insects10090281> [<https://doi.org/10.3390/insects10090281>]

Per mes informació (Consultes GREC [<http://webgrec.udl.cat/cgi-bin/DADREC/crgen.cgi?FONT=3&IDI=CAT&PID=367567&IDNC=201210161350170>])

