



# Matilde Eizaguirre

## Catedràtica d'universitat

### Datos personales



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**Categoría:** Catedràtica d'universitat

**Àrea de conocimiento:** Entomologia

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### Formación Académica

- Enginyera Tècnica Agrícola en Explotacions Agropequàries, Escola Universitària d'Enginyeria Tècnica Agrícola de Lleida. Universitat Politècnica de Catalunya (UPC), 1978
- Enginyera Agrònoma (especialitat de Fitotècnica. Escola Tècnica Superior d'Enginyers Agrònoms (ETSEA) de Lleida. U P C , 1 9 8 3
- Doctora Enginyera Agrònoma, ETSEA. UPC, 1990
- Acreditació d'Investigació Avançada per Càtedra (AQU) 2004
- Certificat d'Habilitació Nacional per Catedràtica d'Universitat desembre 2006

### Experiencia Profesional

- Mestra de Laboratori contractada de la EUIT Agrícola de Lleida. Dedicació exclusiva. Del 1-10-77 al 30-9-82.
- Agregada contractada de l'EUIT Agrícola de Lleida. Dedicació exclusiva. De l'1-1-83 al 6-1-85.
- Mestra de Laboratori contractada de l'ETSEA de Lleida. Dedicació excusiva. De l'1-10-82 al 31-12-82 .
- Professora Titular de l' EUIT Agrícola de Lleida. Dedicació exclusiva. Des del 7-1-85 al 12-07-98.
- Professora Titular d'Universitat de l' ETSEA de Lleida. Dedicació exclusiva. Des del 07-08-98 fins 9-09-07
- Catedràtica d' Universitat de l'ETSEA de Lleida Dedicació exclusiva. Des del 10-09-07

### Investigación

- Control integrat de plagues agrícoles.

### Docencia

- INCENDIS I SANITAT FORESTAL
- PRÀCTIQUES INTEGRADES III

Grau en Enginyeria Forestal  
Grau en Enginyeria Forestal



· SALUT DELS BOSCOS	Grau en Enginyeria Forestal
· PROTECCIÓ VEGETAL	Grau en Enginyeria Agrària i Alimentària
· RESTAURACIÓ DE SUPERFÍCIES AFECTADES PER INCENDIS	Màster Universitari en Incendis Forestals. Ciè Integral
· ENTOMOLOGIA AGRÍCOLA	Màster Universitari en Enginyeria Agronòmica
· PROGRAMES DE PROTECCIÓ INTEGRADA DE CULTIUS	Màster Universitari en Protecció Integrada de Cu
· SISTEMES DE PRODUCCIÓ I PROTECCIÓ VEGETAL	Màster Universitari en Enginyeria Agronòmica

## Publicaciones Recientes

Giron-Calva, Patricia Sarai; Lopez, Carmen; Albacete, Alfonso; Albajes, Ramon; Christou, Paul; Eizaguirre, Matilde. 2021. Beta-carotene and *Bacillus thuringiensis* insecticidal protein differentially modulate feeding behaviour, mortality and physiology of European corn borer (*Ostrinia nubilalis*). PLOS ONE 16 (2): e0246696 DOI 10.1371/journal.pone.0246696

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Zanga, Daniela; Sanahuja, Georgina; Eizaguirre, Matilde; Albajes, Ramon; Christou, Paul; Capell, Teresa; Fraser, Paul; Gerrisch, Chris; Lopez, Carmen. 2018. Carotenoids moderate the effectiveness of a Bt gene against the European corn borer, *Ostrinia nubilalis*. PLOS ONE 13 (7): e0199317. DOI 10.1371/journal.pone.0199317

Zhu, C., Farre, G.; Zanga, D.; Lloveras, J.; Michelena, A.; Ferrio, J. P.; Voltas, J.; Slafer, G.; Savin, R.; Albajes, R.; Eizaguirre, M.; Lopez, C.; Cantero-Martinez, C.; Diaz-Gomez, J.; Nogareda, C.; Moreno, J. A.; Angulo, E.; Estany, J.; Pena, R. N.; Tor, M.; Portero-Otin, M.; Eritja, N.; Arjo, G.; Serrano, J. C. E.; Matias-Guiu, X.; Twyman, R. M.; Sandmann, G.; Capell, T.; Christou, P. 2018. High-carotenoid maize: development of plant biotechnology prototypes for human and animal health and nutrition. Phytochemistry Reviews 17 (2): 195-209. DOI 10.1007/s11101-017-9506-4

Lopez, C.; Munoz, P.; Perez-Hedo, M.; Moralejo, M.; Eizaguirre, M. 2017. How do caterpillars cope with xenobiotics? The case of *Mythimna unipuncta*, a species with low susceptibility to Bt. Annals of Applied Biology 171: 364-375. DOI 10.1111/aab.12380

Cruz, Diego; Eizaguirre, Matilde. 2016. Host location behaviour of gravid females in the Mediterranean corn borer *Sesamia nonagrioides*: external morphology of antennae and ovipositor sensilla. Bulletin of Insectology 69 (2): 181-192.

Cruz, D.; Eizaguirre, M. 2015. Response to conspecific and heterospecific semiochemicals by *Sesamia nonagrioides* (L.) (Lepidoptera: Noctuidae) gravid females. Bulletin of Entomological Research 105 (3): 347-354. DOI 10.1017/S0007485315000206

Cruz, D.; Eizaguirre, M. 2015. Do *Sesamia nonagrioides* (Lepidoptera; Noctuidae) gravid females discriminate between Bt or multivitamin corn varieties? Role of olfactory and visual cues. Journal of Insect Science 15 (1): 33 DOI 10.1093/jisesa/iev018

Lee, Marina S.; Albajes, Ramon; Eizaguirre, Matilde. 2014. Mating behaviour of female *Tuta absoluta* (Lepidoptera: Gelechiidae): polyandry increases reproductive output. Journal of Pest science 87 (3): 429-439 DOI 10.1007/s10340-014-0576-4



Muñoz, Pilar; Lopez, Carmen; Moralejo, Marian; Perez-Hedo, Meritxell; Eizaguirre, Matilde. 2014. Response of Last Instar *Helicoverpa armigera* Larvae to Bt Toxin Ingestion: Changes in the Development and in the CYP6AE14, CYP6B2 and CYP9A12 Gene Expression. *PLOS ONE* 9 (6): e99229. DOI 10.1371/journal.pone.0099229

Lopez, Carmen; Hernandez-Escareno, Gerardo; Eizaguirre, Matilde; Albajes, Ramon. 2013. Antixenosis and larval and adult dispersal in the Mediterranean corn borer, *Sesamia nonagrioides*, in relation to Bt maize. *Entomologia Experimentalis et Applicata* 149 (3): 256-264 DOI 10.1111/eea.12131

Perez-Hedo, Meritxell; Reiter, Daniel; Lopez, Carmen; Eizaguirre, Matilde. 2013. Processing of the maize Bt toxin in the gut of *Mythimna unipuncta* caterpillars. *Entomologia Experimentalis et Applicata* 148 (1):56-64 DOI 10.1111/eea.12074

Perez-Hedo, M.; Lopez, C.; Albajes, R.; Eizaguirre, M. 2012. Low susceptibility of non-target Lepidopteran maize pests to the Bt protein Cry1Ab. *Bulletin of Entomological Research* 102 (6): 737-743. DOI 10.1017/S0007485312000351

Perez-Hedo, Meritxell; Sanchez-Lopez, Isabel; Eizaguirre, Matilde. 2012. Comparative analysis of hemolymph proteome maps in diapausing and non-diapausing larvae of *Sesamia nonagrioides*. *Proteome Science* 10 (58):1-10. DOI 10.1186/1477-5956-10-58.

Depalo, Laura; Dindo, Maria Luisa; Eizaguirre, Matilde. 2012. Host location and suitability of the armyworm larvae of *Mythimna unipuncta* for the tachinid parasitoid *Exorista larvarum*. *Biocontrol* 57 (4):471-479. DOI 10.1007/s10526-011-9422-2

Moyal P., Tokro P., Bayram A., Savopoulou-Soultani M., Contle E., Eizaguirre M., Leru B., Avand-Faghieh A., Frérot B., Stefanos-Andreadis S. 2011. Origin and taxonomic status of the Palearctic population of the stem borer *Sesamia nonagrioides* (Lefèbvre) (Lepidoptera: Noctuidae). *Biological Journal of the Linnean Society* 103 : 904 - 922

Perez-Hedo M., Eizaguirre M., Albajes R. 2011. Modification of hormonal balance in larvae of the corn borer *Sesamia nonagrioides* (Lepidoptera: Noctuidae) due to sublethal *Bacillus thuringiensis* protein ingestion. *Journal of Economic Entomology* 104:853-861

Pérez-Hedo M., Goodman W.G., Schafellner C., Martini A., Sehnal F., Eizaguirre M. 2011. Control of larval-pupal-adult molt in the moth *Sesamia nonagrioides* by juvenile hormone and ecdysteroids. *Journal of Insect Physiology* 57:602-607

Lopez-Alonso C., Eizaguirre M., Albajes R. 2011. Mutual pheromone antagonism in two sympatric corn borers, *Sesamia nonagrioides* and *Ostrinia nubilalis*, under field conditions. *Spanish Journal of Agricultural Research* 9 : 308 - 312

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Blanco E., Bonet J.A, Eizaguirre M. 2009. Uso de imágenes satélite Landsat para la detección de rodales de *Pinus nigra* Arn. y *Pinus sylvestris* L. afectados por escolítidos. *Investigacion Agraria-Sistemas y Recursos Forestales* 18 : 264 - 275

Schafellner C., Eizaguirre M., López C., Sehnal F. 2008. Juvenile hormone esterase activity in the pupating and



diapausing larvae of *Sesamia nonagrioides*. *Journal of Insect Physiology* 54(6):916-921

Eizaguirre M., López C., Albajes R. 2008. Factors affecting the natural duration of diapause and post-diapause development in the Mediterranean corn borer *Sesamia nonagrioides* (Lepidoptera: Noctuidae). *Journal of Insect Physiology* 54(6): 1057-1063

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Eizaguirre M., Tort S., López C., Albajes R. 2005. Effects of sublethal concentrations of *Bacillus thuringiensis* on larval development of *Sesamia nonagrioides*. *Journal of Economic Entomology* 98: 464-470

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Eizaguirre M., López C., Sans A. 2002. Maize phenology influences field diapause induction of *Sesamia nonagrioides* (Lepidoptera: Noctuidae). *Bulletin of Entomological Research* 92: 439-433

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