

## Nicolas RIS

14/01/1975

Male

### ADDRESS

---

#### UMR INRA-CNRS-UNS « Institut Sophia-Agrobiotech »

Centre INRA PACA

400 route des Chappes – BP167

06903 Sophia-Antipolis (FRANCE)

33 (0) 4 92 38 65 01

**Nicolas.Ris@inra.fr**

### MAIN ACTIVITIES

---

- **Research and development in biological control using entomophagous insects (parasitoids and predators)**
- **Characterization and exploitation of inter- and intra- specific variabilities in biocontrol agents**
- **Genetic improvement of biocontrol agents or other useful insect species**

### PROFESSIONAL EXPERIENCES

---

Since January 2012     **Responsible of the Team** « Recherches et Développement en Lutte Biologique » within « Institut Sophia Agrobiotech » (UMR INRA (n°1355) – CNRS (n°7254) - UCA)

2008-2011                 **Director of the laboratory** « Unité Expérimentale Lutte Biologique » INRA (n°1254):

Since April 2004         **Permanent Engineer** (« Ingénieur de recherche », Institut National de la Recherche Agronomique) at INRA Sophia-Antipolis

2003-2004                 **Temporary Assistant Teacher** (Attaché Temporaire d'Enseignement et de Recherche) at Université Paris XI

### LAST DIPLOMA

---

2003                         **PhD Thesis in Evolutionary Biology**, Univ. Claude Bernard Lyon 1 (France)

### STUDENT SUPERVISION

---

- PhD students

2015-2019                 **ION SCOTTA Michela** – “Community ecology and local adaptations of *Trichogramma* species” (Hymenoptera: Trichogrammatidae) – University Côte d’Azur – co-supervision with Elodie Vercken, INRA

2013- 2015                 **AL KHATIB Fadel** – “Systematics and ecology of *Eupelmus* species (Hymenoptera: Eupelmidae) in West Palearctic” – Montpellier SupAgro – co-supervision with Gerard Delvare, CIRAD)

2007-2011                 **CHEYPE-BUCHMANN Sandrine** – “Intraspecific variability and hybridization in *Psytalia lounsburyi* (Hymenoptera: Braconidae) – University Nice Sophia-Antipolis – co-supervision with Xavier Fauvergue, INRA

- Other students ; >15 students (Licence, Master, etc) (co)supervised during the last 15 years

**DI RV 17 0076** (2017) Protocole d'amélioration génétique et de sélection de lignées de *Trichogramma brassicae* contre la pyrale du maïs *Ostrinia nubilalis* – INRA & BIOLINE Agrosiences

**h-index: 12** (Web of Science -16/10/2020)

2020

Muru D, Borowiec N, Thaon M, Ris N, I-M Viciriuc, Warot S, Vercken E (2020) The open bar is closed: restructuration of a native parasitoid community following successful control of an invasive pest. **Peer Community In Zoology**. doi.org/10.1101/2019.12.20.884908.

Ivezic A, Rugman-Jones P, Malause T, Ris N, Ignjatovic-Cupina A (2020) Molecular identification of *Trichogramma* species parasitizing *Ostrinia nubilalis* in corn and pepper in south–east border of Europe. **International Journal of Pest Management** doi.org/10.1080/09670874.2020.1779383

2019

Borowiec N, La Salle J, Brancaccio L, Thaon M, Warot S, Branco M, Ris N, Malausa J-C, Burks R (2019) *Ophelimus mediterraneus* sp. n. (Hymenoptera, Eulophidae): a new *Eucalyptus* gall wasp in the Mediterranean region. **Bulletin of Entomological Research**. Doi:10.1017/S0007485318001037.

2018

Iacovone A, Ris N, Poirie M, Gatti JL (2018) Time-course analysis of *Drosophila suzukii* interaction with endoparasitoid wasps evidences a delayed encapsulation response compared to *D. melanogaster* **Plos One** 13 doi:10.1371/journal.pone.0201573

Girod P et al. (2018) The parasitoid complex of *D. suzukii* and other fruit feeding *Drosophila* species in Asia **Scientific Reports** 8 doi:10.1038/s41598-018-29555-8

Borowiec N, Thaon M, Brancaccio L, Cailleret B, Ris N, Vercken E (2018) Early population dynamics in classical biological control: establishment of the exotic parasitoid *Torymus sinensis* and control of its target pest, the chestnut gall wasp *Dryocosmus kuriphilus*, in France **Entomologia Experimentalis Et Applicata** 166:367-379 doi:10.1111/eea.12660

Mougin C, [14 authors], Ris N, Sallé G (2018) BRC4Env, a network of Biological Resource Centres for research in environmental and agricultural sciences. **Environmental Science and Pollution Research**. <https://doi.org/10.1007/s11356-015-1973-7>

Rahimi-Kaldehy S., Ashouri A, Bandani A, Ris N (2018) Abiotic and biotic factors influence diapause induction in sexual and asexual strains of *Trichogramma brassicae* (Hym: Trichogrammatidae). **Scientific Reports**. 8:17600 doi:10.1038/s41598-018-35626-7

2017

Quaglietti B, Gautier P, Groussier G, Fleisch A, Kreiter P, Ris N, Malausa T (2017) Pre-release host range determination of the parasitoid *Allotropa burrelli* for the biocontrol of *Pseudococcus comstocki* in France **Journal of Applied Entomology** 141:665-668 doi:10.1111/jen.12407

Kremmer L, Thaon M, Borowiec N, David J, Poirie M, Gatti JL, Ris N (2017) Field Monitoring of *Drosophila suzukii* and Associated Communities in South Eastern France as a Pre-Requisite for Classical Biological Control **Insects** 8 doi:10.3390/insects8040124

Kremmer L, David J, Borowiec N, Thaon M, Ris N, Poirie M, Gatti JL (2017) The African fig fly *Zaprionus indianus*: a new invasive pest in France? **Bulletin of Insectology** 70:57-62

## 2016

Al khatib F, Cruaud A, Fusu L, Genson G, Rasplus J-Y, Ris N, Delvare G (2016) Multilocus phylogeny and ecological differentiation of the “*Eupelmus urozonus* species group” (Hymenoptera, Eupelmidae) in the West-Palaeartic. **BMC Evolutionary Biology**. DOI 10.1186/s12862-015-0571-2.

Correa MCG, Palero F, Dubreuil N, Etienne L, Hulak M, Tison G, Warot S, Crochard D, Ris N, Kreiter P (2016) Molecular characterization of parasitoids from armored scales infesting citrus orchards in Corsica, France. **BioControl**. DOI 10.1007/s10526-016-9752-1.

Malausa T, Delaunay M, Fleisch A, Groussier-Bout G, Warot S, Crochard D, Guerrieri E, Delvare G, Pelizzari G, Kaydan MB., Al Khateeb N, Germain JF, Bracchio L, Le Goff I, Bessac M, Ris N, Kreiter P (2016) Investigating biological control agents for controlling invasive populations of the mealybug *Pseudococcus comstocki* in France. **Plos ONE**. 11(6): e0157965. DOI: 10.1371/journal.pone.0157965.

## 2015

Vercken E, Fauvergue X, Ris N, Crochard D, Mailleret L (2015) Temporal autocorrelation in host density increases establishment success of parasitoids in a experimental system. **Ecology and Evolution**. 5:2684-93.

## 2014

Al khatib F, Fusu L, Cruaud A, Gibson G, Borowiec N, Rasplus J-Y, et al. (2014) Availability of eleven species names of Eupelmus (Hymenoptera, Eupelmidae) proposed in Al khatib et al. **Zookeys**. 2015; 505:137-45.

Vayssade C, Fazio Cd, Quaglietti B, Auguste A, Ris N, Fauvergue X (2014) Inbreeding depression in a parasitoid wasp with single-locus complementary sex determination. **PLoS ONE**. 9(6):e97733.

Hok S, Allasia V, Andrio E, Naessens E, Ribes E, Panabieres F, et al. (2014) The receptor kinase impaired oomycete susceptibility 1 attenuates abscisic acid responses in Arabidopsis. **Plant Physiology**. 166(3):1506-18.

Al khatib F, Fusu L, Cruaud A, Gibson G, Borowiec N, Rasplus JY, et al. (2014) An integrative approach to species discrimination in the *Eupelmus urozonus* complex (Hymenoptera, Eupelmidae), with the description of 11 new species from the Western Palaeartic. **Systematic Entomology**. 39(4):806-62

## 2013

Vercken E, Vincent F, Mailleret L, Ris N, Tabone E, Fauvergue X (2013) Time-lag in extinction dynamics in experimental populations: evidence for a genetic Allee effect? **Journal of Animal Ecology**. 82(3):621-31.

## 2012

Benvenuto C, Tabone E, Vercken E, Sorbier N, Colombel E, Warot S, Ris N (2012) Intraspecific variability in the parasitoid wasp *Trichogramma chilonis*: can we predict the outcome of hybridization? **Evolutionary Applications**. 2012;5(5):498-510.

Benvenuto C, Cheyppé-Buchmann S, Bermond G, Ris N, Fauvergue X (2012) Intraspecific hybridization, life history strategies and potential invasion success in a parasitoid wasp. **Evolutionary Ecology**. 26(6):1311-29.

Abd-Rabou S, Shalaby H, Germain JF, Ris N, Kreiter P, Malausa T (2012) Identification of mealybug pest species (Hemiptera: Pseudococcidae) in Egypt and France, using a DNA barcoding approach. **Bulletin of Entomological Research**. 102(5):515-23.

## 2011

Malausa T, Fenis A, Warot S, Germain JF, Ris N, Prado E, et al. (2011) DNA markers to disentangle complexes of cryptic taxa in mealybugs (Hemiptera: Pseudococcidae). **Journal of Applied Entomology**. 135(1/2):142-55.

Djian-Caporalino C, Molinari S, Palloix A, Ciancio A, Fazari A, Marteu N, et al. (2011) The reproductive potential of the root-knot nematode *Meloidogyne incognita* is affected by selection for virulence against major resistance genes from tomato and pepper. **European Journal of Plant Pathology**. 131(3):431-40.

Cheyppe-Buchmann S, Bon MC, Warot S, Jones W, Malausa T, Fauvergue X, et al. (2011) Molecular characterization of *Psytalia lounsburyi*, a candidate biocontrol agent of the olive fruit fly, and its *Wolbachia* symbionts as a pre-requisite for future intraspecific hybridization. **BioControl**. 56(5):713-24.

#### before 2011

Malausa T, Fenis A, Warot S, Germain JF, Ris N, Prado E, et al. DNA markers to disentangle complexes of cryptic taxa in mealybugs (Hemiptera: Pseudococcidae). **Journal of Applied Entomology**. 2009; 135(1-2):142-55.

Fleury F, Gibert P, Ris N, Allemand R. Ecology and life history evolution of frugivorous *Drosophila* parasitoids. **Advances in Parasitology**. 2009;70:3-44.

Bon MC, Jones W, Hurard C, Loiseau A, Ris N, Pickett C, et al. Identification of 21 polymorphic microsatellites in the African parasitoid wasp, *Psytalia lounsburyi* (Silvestri) (Hymenoptera: Braconidae). **Molecular Ecology Resources**. 2008;8(4):930-2.

#### OTHER PUBLICATIONS IN ENGLISH DEALING WITH BIOLOGICAL CONTROL AND/OR APPLIED ENTOMOLOGY

---

Trottin Y, Paulhiac E, Zicot A, Baffert V, Leyre JM, Weydert C, Poyet M, Ris N, Gibert P. Experimental studies on *Drosophila suzukii* (Matsumura) (Diptera: Drosophilidae) in protected strawberry crops: biology of the pest and effectiveness of a pupal parasitoid in field conditions in France. **IOBC/WPRS Bulletin**. 2015;109:219-245.

Iacovone A, Girod P, Ris N, Weydert C, Gibert P, Poirié M, Gatti JL. Worldwide invasion by *Drosophila suzukii*: does being the cousin of a model organism really help setting up biological control ? Hopes, disenchantments and new perspectives. **Revue d'Ecologie (Terre et Vie)**. 2015;70:207-14.

Borowiec N, Thaon M, Brancaccio L, Warot S, Vercken E, Fauvergue X, et al. Classical biological control against the chestnut gall wasp *Dryocosmus kuriphilus* (Hymenoptera, Cynipidae) in France. **Plant Protection Quarterly**. 2014;29(1):7-10.

Borowiec N, Groussier-Bout G, Vercken E, Thaon M, Auguste-Maros A, Warot-Fricaux S, et al. Diversity and geographic distribution of the indigenous and exotic parasitoids of the olive fruit fly, *Bactrocera oleae* (Diptera: Tephritidae), in Southern France. **IOBC/WPRS Bulletin**. 2012;79:71-8.

Ris N, Malausa JC. Research and development in classical biological control with emphasis on the recent introductions of insect parasitoids. In: Nicot P, editor. **Classical and augmentative biological control against diseases and pests : critical status analysis and review of factors influencing their success**: IOBC/WPRS; 2011. p. 20-33.

Malausa JC, Blanchet A, Bon MC, Cheyppe-Buchmann S, Groussier-Bout G, Jones W, et al. Introduction of the African parasitoid *Psytalia lounsburyi* in south of France for the classical biological control of *Bactrocera oleae*: will hybridization affect establishment and population growth? **IOBC/WPRS Bulletin**. 2010;53:49-55.

Malausa JC, Auguste-Maros A, Cheyppe-Buchmann S, Groussier-Bout G, Ris N, Thaon M, et al. Introductions of the African parasitoid *Psytalia lounsburyi* in South of France for classical biological control of *Bactrocera oleae*. **IOBC/WPRS Bulletin**. 2010;59:163-70.

Bon MC, Blanchet A, Fauvergue X, Jones W, Hoelmer K, Kirk A, et al. Relevance of molecular genetics for classical biological control of the olive fruit fly, *Bactrocera oleae* (Rossi) (Diptera: Tephritidae) using the endoparasitoid *Psytalia lounsburyi* (Silvestri) (Hymenoptera: Braconidae). **IOBC/WPRS Bulletin**. 2010;59:162.

Wajnberg E, Ris N. Parasitism and biological control. In: Thomas F, Guégan JF, Renaud F, editors. **Ecology and evolution of parasitism**. Oxford: Oxford University Press; 2007. p. 107-27.

Lefèvre T, Ris N, Mitta G. Methods. In: Thomas F, Guégan JF, Renaud F, editors. **Ecology and evolution of parasitism**. Oxford: Oxford University Press; 2007. p. 165-81.

---

**PUBLICATIONS IN FRENCH JOURNALS OR BOOKS IN FRENCH DEALING WITH BIOLOGICAL CONTROL AND/OR APPLIED ENTOMOLOGY**

---

Kreiter P., Germain J-F., Balmes V., et al. (2020) Diversité des cochenilles en horticulture ornementale. **Phytoma, la Défense des Végétaux**. 736, 41-46.

Bout Alexandre, Le Goff I, Cesari L, Genson G, Gard B, Ris N, Streito J-C (2019) Solutions de lutte biologique pour maîtriser les punaises. **Phytoma, la Défense des Végétaux**. 729 : 22-27.

Ouvrage collectif (2018) **Les conquêtes de l'INRA pour le Biocontrôle**. 32 pages

Bout A, Marchand A, Robert F, Silvy E, Crochard D, Malausa T, Ris N, Reynaud P (2018) Des outils moléculaires pour caractériser la diversité réelle des thysanoptères en cultures ornementales et faciliter le diagnostic. **Innovations Agronomiques**. 63 : 421-432.

Dumbardon-Martial T, Lucas P-D, Warot S, Ris N, Groussier G (2018) Recherche d'espèces du genre *Trichogramma* sur Cucurbitacées cultivées et plantes associées en Martinique en vue du développement e méthodes de lutte biologique (Hymenoptera, Trichogrammatidae). **Bulletin de la Société Entomologique de France**. 123 : 401-410.

Muru D, Auguste A, Fauvergue X, Malausa T, Ris N, Thaon M, Vercken E, Borowiec N (2018) Un parasitoïde exotique pour lutter contre le carpocapse. **Phytoma, la Défense des Végétaux**. 710 : 37-41.

Marchand A, Sellier N, Warot S, Ion Scotta M, Ris N, Groussier-Bout G (2107) Formalisation d'un centre de ressources biologiques dédié aux parasitoïdes oophages : CRB Ep-Coll. **Le Cahiers des Techniques de l'INRA**. Numéro spécial « Innovations Entomologies : du laboratoire au champs ! » : 49-58.

Thaon M, Audant P, Ris N, Borowiec N (2017) Entomopolis : de la production de masse d'insectes auxiliaires au maintien de macro-organismes réglementés. **Le Cahiers des Techniques de l'INRA**. Numéro spécial « Innovations Entomologies : du laboratoire au champs ! » : 59-68.

Thaon M, Malausa J-C, Ris N, Borowiec N, Exilien R (2016) Capacité d'hivernation d'un auxiliaire de lutte biologique contre la mouche de l'olive. **Le Nouvel Olivier**. 106 : 20-24.

Warot S, Bon M, Ris N (2013) Caractérisation des bactéries endosymbiotiques *Wolbachia* d'un auxiliaire de lutte biologique contre la mouche de l'olive *Psytalia lounsburyi*. **Le Cahier des Techniques de l'INRA**. 2013;78:1-14.

Chabert S, Allemand R, Poyet M, Ris N, Gibert P (2013) *Drosophila suzukii*, vers une lutte biologique contre ce ravageur des fruits rouges. **Phytoma, la Défense des Végétaux**. 660:34-8.

Borowiec N, Thaon M, Brancaccio L, Warot S, Risso S, Bertoncello E, et al. (2013) Lutte biologique contre le cynips du châtaignier - Objectifs et enjeux de cette lutte biologique dite « classique ». **Phytoma, la Défense des Végétaux**. 662:32-5.

Borowiec N, Thaon M, Brancaccio L, Warot S, Ris N, Malausa JC. (2012) Les hyménoptères galligènes de l'Eucalyptus en France (Hymenoptera: Eulophidae): une nouvelle espèce d'*Ophelimus* Haliday

menace les plantations d'Eucalyptus dans la région méditerranéenne. **Phytoma, la Défense des végétaux**. 656:42-4.

Borowiec N, Fleisch A, Kreiter P, Tabone E, Malausa T, Fauvergue X, et al. (2011) Lutte biologique classique et insectes phytophages : Où en est la recherche ? Quels sont les enjeux et dans quels contextes ? Quelle évolution future ? **Phytoma, la Défense des végétaux**. 647:16-20.

Ris N, Warot S, Ruiz A, Giuge L, Germain JF, Malausa T, et al. (2010) Intérêt du diagnostic moléculaire pour identifier les cochenilles farineuses afin d'améliorer la lutte biologique en vigne, vergers, serres et ZNA. **Phytoma, la Défense des végétaux**. 631:39-43.

Thaon M, Blanchet A, Ris N (2009) Contribution à l'optimisation de l'élevage du parasitoïde *Psytalia lounsburyi*. **Cahiers des Techniques INRA**. 66:21-31.

Groussier-Bout G, Thaon M, Auguste-Maros A, Treuvey N, Frank B, Gratraud C, et al. (2009) Lutte biologique contre la mouche de l'olive : introduction en France d'un nouvel auxiliaire, *Psytalia lounsburyi*. **Le Nouvel Olivier**. 72:3-7.

---

#### OTHER PUBLICATIONS IN FRENCH

Morel-Journel T, Fauvergue X, Lombaert E, Mailleret L, Malausa T, Ris N, et al. De l'utilisation de microcosmes pour le test d'hypothèses en biologie de l'invasion. **Revue d'Ecologie (Terre et Vie)**. 2015;70:16-27.

Ris N, Fauvergue X, Kreiter P, Malausa JC, Malausa T, Tabone E. La lutte biologique : de la Recherche à l'Application. In: Suty L, editor. **La lutte biologique: vers de nouveaux équilibres écologiques**. Dijon / Versailles: Educagri / Quae; 2010. p. 285-96.

---

#### INVITATIONS TO SEMINARS, WORKSHOPS; ETC

Ris N, Malausa T. Biocontrôle : Perspectives de gestion des bioagresseurs émergents. **Rencontre Sud-Ouest de la Surveillance Biologique du Territoire**; Bordeaux Sciences Agro, Gradignan, France - 2015. > 200 participants

Ris N. Biodiversités « nuisible » et « utile » dans les agrosystèmes : Importance, méthodes et pertinence pour la lutte biologique. **Séminaire international "Protection des cultures stratégiques en Algérie : Situation et perspectives d'avenir"**; Chlef, Algérie 2013.

Ris N. Biodiversités "utile" et "nuisible" : exemple de la lutte biologique. **Colloque SEF 2013 « L'Entomologie en France : son utilité publique »**; Paris, France 2013.

*PARTICIPATIONS (ORAL COMMUNICATIONS OR POSTERS) TO (INTER)NATIONAL SEMINARS, WORKSHOPS, SYMPOSIUMS, ETC CAN BE PROVIDED UNDER REQUEST*