

Christiane Amedegnato-Loisele

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Personal Data

Birth Date: January, 21, 1945
Nationality: French

Education

1963-1968 Science studies in Earth and life Sciences: Degree in Natural Sciences : License and Master in Animal Biology (Faculty of Sciences, University of Toulouse/Paul Sabatier)
1969 Specialization in Entomology (University Paris VI, Pierre et Marie Curie).
1977 Thesis of State Doctorate, University Paris VI, Pierre et Marie Curie. Title: "Etude des Acridoidea centre et Sud Américains (Catantopinae sensu lato): anatomie des genitalia, classification, repartition, phylogenie.

Professional Experience

1968 Technician at the Laboratory of Entomology (Faculty of Sciences, University of Toulouse/Paul Sabatier).
1970-78 College teacher and free worker at the Laboratory of Entomology of the M.N.H.N, Paris (thesis).
1979 CNRS researcher at the Laboratory of Entomology of the MNHN).
1982-87 Responsible of the team " Insects of tropical preforests and forest regions ".
1984-88 Elect member of the Scientific Council of the M.N.H.N.
1982-99 Responsible for the Orthoptera (sensu lato) department of the Laboratory of Entomology at M.N.H.N.

Research Interests

Subjects

Specialization: Acridomorpha (mainly neotropical region); their diversity is approached through three levels: world level (notably phylogeny and Africa / America relationships); continental level (most of my works make references to synthetic elements of biogeography and phylogeny at this level); community level and evolution dynamics.

Research themes

Systematics, phylogeny and biogeography
Relationships community structure / phylogeny

Functional and phylogenetic components of biodiversity genesis and variations within the acridofauna, notably for pristine forests and regenerations canopies. Acridid insects reactions to environmental variables such as degradation, in relation to biological potentialities (impact of man on the environment and indicator species)

Current studies

(data acquired during recent field works (mainly Ecuador)

Analysis of a transect through the postulated "Napo refuge": structure and diversity of canopy acridid populations in 4 points (from low subandean Amazonia to banks of the Amazon river).

Study of the palmicolous acridofauna: functional and phylogenetic structure of the specialized phyla (three groups belonging to two families) in connection with the host phylum phylogenetic and distribution patterns.

Functional and phylogenetic structures of acridid communities along altitudinal transects (andean slopes)

Study of man impact of the on acridid populations (indigenous agrosystems and regeneration canopies)

Analysis of the different taxa uncovered during these works.

Collections

The Museum is in charge of constitution, management and conservation of collections which are one the most important outcomes of research led in the biodiversity area. It is one of the main axes of the establishment. Results of a continuous enrichment since the early exploration travels of the first naturalists pioneers to the current studies are collections that place the Museum to the world forefront for Acridomorpha. The Museum notably harbours the greatest existent neotropical collection, almost entirely recent and the unique canopy collection (almost all known species represented there by typical material). My own contribution is in these last areas. An updated database is maintained, for research and collections management needs.

Missions

17 long duration missions, mainly in Amazonia and neotropical forest regions (Peru, Ecuador, Brazil) but also in dry northeast Brazil, Nicaragua and Mexico.

Teaching and Work direction

At the level of specialization: theses; postdoctoral internships; acridological specialization and training for foreigners of concerned countries;

Other Collective Activities

Reviewer for different foreign and French reviews or books;

Expert and consultant for Cooperation and the Environment Ministries, as well as for different research organisms;

Knowledge dispatching: participation to temporary or permanent exhibitions of the Laboratory of Entomology and of the MNHN ("Gallery of Evolution").

Scientific Publications and Contributions

- 1 - 1970. Acridomorpha (Orthoptera) récoltés en Guyane Française par la mission du Muséum National d'Histoire Naturelle. Annales de la Société Entomologique de France (N.S.) 6, 861-897 (Descamps M. and Amedegnato, C.).
- 2 - 1971a. Contribution a la faune des Acridoidea de Colombie (Missions M. Descamps). I. Les genres Syntomacris Walker, 1870 et Pseudococama, nov. Annales de la Société Entomologique de France (N.S.) 7, 95-113 (Descamps M. and Amedegnato, C.).
- 3 - 1971b. Contribution a la faune des Acridoidea de Colombie (Missions M. Descamps). II. Les genres Taeniophora Stal, 1873 et Megacephalacris, nov. 7(1). Annales de la Société Entomologique de France (N.S.) 7, 115-146 (Descamps M. and Amedegnato, C.).
- 4 - 1972a. Contribution à la faune des Acridoidea de Colombie (Missions M. Descamps). III. Diagnoses de Catantopinae(sensu lato). Annales de la Société Entomologique de France (N.S.) 8, 505-559 (Descamps M. and Amedegnato, C.).
- 5 - 1972b. Contribution à la faune des Acridoidea de Colombie (Missions M. Descamps). IV. Le groupe Rhytidochrotae. Bulletin du Muséum National d'Histoire Naturelle, Paris, 3° sér. Zool. 65, 1057-1096 (Descamps M. and Amedegnato, C.).
- 6 - 1974. Les genres d'acridiens neotropicaux, leur classification par familles, sous-familles et tribus. *Acrida* 3, 113- 204.
- 7 - 1976. Structure et évolution des génitalia chez les Acrididae et familles apparentées. *Acrida* 5, 1-15.
- 8 - 1977. (Amédégnato-Loisèle, C.) Etude des Acridoidea centre et sud américains (Catantopinae sensu lato), Anatomie des génitalia, classification, répartition, phylogénie. Thèse de Doctorat d'Etat, Université Pierre et Marie Curie, Paris.
- 9 - 1978. Diagnoses et signalisations d'acridiens néotropicaux (Orth. Acridoidea). *Acrida* 7, 28-53 (Amedegnato, C. and Descamps M.) .
- 10 - 1979a. Diagnoses génériques et affinités phylétiques d'Acridoidea néotropicaux récoltés par le Dr. Campos Sea bra et M. Descamps (Orthoptera). Annales de la Société Entomologique de France (NS) 15, 423-487 (Amedegnato, C. and Descamps, M.) .
11. 1979b Origin of Central and South American faunas (thèse)(Symposium: biogeography and speciation of Acrididae). In 2nd.Triennial Meeting, Pan American Acridological Society. 1979. Bozeman, Montana 21-25 July 1979.
- 12 - 1979c. History and phylogeny of the Neotropical Acridid fauna. *Metaleptea* 2, 1-10 (Amedegnato, C. and Descamps M.)
- 13 - 1980a. Etude comparative de quelques peuplements acridiens de la forêt néotropicale. *Acrida* 9, 171-216 (Amedegnato, C. and Descamps M.)
- 14 - 1980b. Evolution des populations d'Orthoptères d'Amazonie du nord-ouest

- dans les cultures et les formations secondaires d'origine anthropique. *Acrida* 9, 1-33 (Amedegnato, C. and Descamps M.) .
- 15 - 1981a. Dispersal centres of the Amazonian acridids (Orthoptera, Acrididae). 3rd.Triennial Meeting, Pan American Acridological Society, Maracay, Aragua Venezuela 05-10 July 1981 (Proceedings of the)(Amedegnato, C. and Descamps, M.) .
- 16 - 1982. Dispersal centres of the Amazonian acridids. *Acta Amazonica* 12, 155-165, (Amedegnato, C. and Descamps M.)
- 17 - 1983. General structure of Guiano Amazonian Acridomorph Population. 2nd.Triennial Meeting, Pan American Acridological Society, Bozeman, Montana, 21-25 July 1979 pp. 113-137. (Proceedings of the) (Amedegnato, C. and Descamps M.) .
- 18 - 1985a. *Cephalocoema protopeirae* n. sp., proscopide nuisible aux cultures au Brésil (Orthoptera, Proscopioidea). *Revue Française d'Entomologie (NS)* 7, 71-75.
- 19 - 1985b. Descriptions d'Ommatolampinae inféodés aux troncs et branches maîtresses (Orthoptera, Acrididae). *Annales de la Société Entomologique de France (NS)* 21, 51-68.
- 20 - 1986. Une nouvelle espèce du genre *Bucephalacris* (Acrididae, Copiocerinae). *Annales de la Société Entomologique de France (NS)* 22, 279-281.
- 21 - 1986. Diagnoses et signalisations de Romaleidae arboricoles amazoniens (Orthoptera, Acridoidea). *Annales de la Société Entomologique de France (NS)* 22, 423-455 (Amedegnato, C. and Poulain S.)
- 22 - 1987. *Jodacris carayoni* n.sp. (Acridoidea, Ommatolampinae). *Annales de la Société Entomologique de France (NS)* 23, 206-207.
- 23 - 1987. Les acridiens néotropicaux I: Proctolabinae Amazoniens (Orthoptera, Acrididae). *Annales de la Société Entomologique de France (NS)* 23, 399-434 (Amedegnato, C.and Poulain S.)
- 24 -1989a. Les genres *Vilerna*, *Locheuma* et *Pseudovilerna* nov. I. Le genre *Vilerna* Stal, 1873 (Orthoptera, Acrididae, Ommatolampinae). *Revue française d'Entomologie (N.S.)* 11, 17-28 (Descamps M.and Amedegnato, C.) .
- 25-1989b. Les genres *Vilerna*, *Locheuma* et *Pseudovilerna* nov. II. Les genres *Locheuma* Scudder, 1896 et *Pseudovilerna* nov.(Orthoptera, Acrididae, Ommatolampinae). *Revue française d'Entomologie (N.S.)* 11, 53-59 (Descamps M. and Amedegnato, C.) .
- 26 -1990. Organisation phylétique, spatiale et trophique des peuplements d'Acridiens forestiers amazoniens. (abstract). *Actas de la 5° Reunion Internacional de la Sociedad de Orthopterologos*. 17-20 Juillet 1989, Valsain (Segovie).*Boletin de Sanidad Vegetal, Fuera de Serie*.
- 27 -1993. African-American relationships in the Acridians (Insecta, Orthoptera), pp. 59-75. In W. George and R. Lavo cat [eds.], *The Africa-South America Connection*, Oxford Science publications, Clarendon Press, Oxford.
- 28 -1994. The Acridids (Orthoptera) of the Amazonian canopies. VI Int. Congr. of Ecology. Section: Forest ecology, Symposium: Terrestrial Invertebrates of tree canopies, Manchester (Proceedings of the).

- 29 - 1994. Nouvelles données sur les peuplements acridiens nord andéens et nord-ouest amazoniens: la famille des Romaleidae. *Annales de la Société entomologique de France (NS)* 30, 1-24 (Amedegnato, C. and Poulain S.)
- 30 - 1995. Acridiofauna cubana (Orthoptera): sinopsis de su taxonomia y origen. *Revista Brasileira de Entomologia* 3, 683-708, with A. Ruiz-Baliu, and C. S. Carbonell.
- 31 - 1995. Habitat preferences of canopy grasshoppers with regard to animal / plant associations. Second International ESF-Workshop on Tropical Canopy research: Tropical forest Canopies as an Environment for Arthropods and Epiphytes, with Special Regard to the Phyllosphere, Ulm, Germany. (Proceedings of the), pp. 47-48.
- 32 - 1996. L'acridofaune palmicole neotropicale: diversité et origine, 28 pp. In: La faune entomologique des palmiers dans les écosystèmes forestiers de l'Amazonie péruvienne; coordinateur: G. Couturier. Programme SOFT, subvention 91209, Convention ORSTOM 224. Rapport Ministère de l'Environnement.
- 33 - 1997. Diversity in an Amazonian canopy grasshoppers community in relation to resource partition and phylogeny., pp. 281-319. In N. E. Stork, J. A. Adis and R. K. Didham [eds.], *Canopy Arthropods*, Chapman & Hall, London.
- 34 - 1998a. Biodiversité des Acridiens néotropicaux: origine et facteurs environnementaux de ses variations (étude d'un transect à travers le refuge du Napo). Contrat n° 93193. Programme SOFT, Conservation des espèces et des écosystèmes. Rapport Ministère de l'Environnement, Paris, 23 pp.
- 35 - 1998b. Diversity of Amazonian acridid populations and agriculture types. INTECOL VII - New tasks for ecologists after Rio 1992. Symposium: Agriculture biodiversity and sustainable management in the tropics (Proceedings of the VII International Congress of Ecology, Florence: 19-25 Juillet 1998.), p. 14.
- 36 - 1998c. New Acridoid taxa from Northwestern South America: their significance for phylogeny and the biogeography of the family Acrididae. *Annals of the entomological Society of America*, 91 (5), 532-548, (Amedegnato, C. and Poulain S.)
- 37 - en rev. Diversity patterns in successional communities of Amazonian grasshoppers, with historical and evolutionary implications. *Ecological Entomology*.
- 38 - en prep. The Neotropical Palm acridofauna: diversity and origin.

Congress (communication orale)

1. 1979 2nd. Triennial Meeting, Pan American Acridological Society. Bozeman, Montana, 21-25 July 1979: General structure of Guiano Amazonian Acridomorph Population (Symposium: Population and community ecology).
2. 1979 2nd. Triennial Meeting, Pan American Acridological Society. Bozeman, Montana 21-25 July 1979: Origin of central and south american faunas (thèse) (Symposium: biogeography and speciation of Acrididae). Invitation.
3. 1981 3rd. Triennial Meeting, Pan American Acridological Society, Maracay Aragua Venezuela 05-10 July 1981: Dispersal centers of the Amazonian acridids (Orthoptera, Acrididae).
4. 1989 5° Reunion Internacional de la Sociedad de Orthopterologos. 17-20

Juillet 1989, Valsain (Segovie): Organisation phylétique, spatiale et trophique des peuplements d'Acridiens forestiers amazoniens.

5. 1994 VI International congress of Ecology, Août 1994 Manchester: The Acridids (Orthoptera) of the Amazonian canopies (Section: Forest ecology, Symposium: Terrestrial Invertebrates of tree canopies). Invitation.

6. 1995 Second International ESF-Workshop on Tropical Canopy research: Tropical forest Canopies as an Environment for Arthropods and Epiphytes, with Special Regard to the Phyllosphere. 27-30 Juillet 1995, Ulm, Germany: Habitat preferences of canopy grasshoppers with regard to animal / plant associations. Invitation.

7. 1998 INTECOL VII - New tasks for ecologists after Rio 1992, Florence: 19-25 Juillet 1998: Diversity of Amazonian acridid populations and agriculture types (Symposium: Agriculture biodiversity and sustainable management in the tropics). Invitation.