

Curriculum Vitae

PERSONAL INFORMATION

Santiago Montoya-Molina

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ONLINE INFORMATION

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ACTIVE RESEARCH GROUPS

1. Systematic and Forensic Entomology – **Czech University of Life Sciences Prague, Prague, Czech Republic.**
2. Detritivores and micetocoles beetles- **Federal University of Viçosa, Viçosa, Brazil.**
3. Group on Ecology, Agro-ecosystems and Natural Habitats (**GEAHNA**)- **University of Valle, Cali, Colombia.**

BASIC AND ACADEMIC FORMATION

Under-graduation studies/University

UNIVERSIDAD DEL VALLE, Biology-Entomology August 2007 – June 2014 Cali- Colombia. **Research:** Dung beetles (Coleoptera: Scarabaeinae) diversity in three land uses in the Cesar River Valley. **Advisor:** Dr. Carolina Giraldo-Echeverry Ph.D. **Co-advisor:** Dr. James Montoya-Lerma Ph.D.

This work was supported by the Administrative Department of Science, Technology and Innovation-Colciencias and Federación Colombiana de Ganaderos- FEDEGAN (Grant 527-2011)

Pos-graduation/University

UNIVERSIDAD FEDERAL DE MATO GROSSO. Master in Ecology and Biodiversity Conservation (2016-2018) Cuiabá-MT, Brasil. **Research:** Taxonomic review of the *Dichotomius* (*Luederwaldtinia*) *agenor* species group (Coleoptera: Scarabaeidae: Scarabaeinae) **Advisor:** Dr. Fernando Z. Vaz-de-Mello Ph.D.

This work was supported by National Council for Scientific and Technological Development (CNPq) Grant: Protax/CNPq 440604/2015s0.

Pos-graduation/University (Ongoing)

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE. Ph.D Student at the Ecology department, Faculty of Environmental Sciences. **Research:** An overview of the thermal biology of the Central European *Thanatophilus* (Coleoptera: Silphidae) species: carrion beetles as an important tool for the forensic sciences. **Supervisor:** doc. Ing. Jan Růžička, Ph.D. - Czech University of Life Sciences Prague; **Advisor:** Ing. Pavel Jakubec, Ph.D - Czech University of Life Sciences Prague.

This work was funded by the two different grants from the Czech University of Life Sciences. Grant: 42110/1312/3159 and 42110/1312/3145

COMPLEMENTARY STUDIES

1. Workshop in Biosecurity and Genetically Modified Organisms- Universidad del Valle: March 2012
2. Course Analysis of the Diversity - Ecology Institute, A.C. INECOL. April 2014 – Mayo 2014
3. Practical identification and phylogenetic topics of American Scarabaeinae - Federal University of Mato Grosso, Brazil. October 2015.
4. Practical identification of American Scarabaeinae - Federal University of Mato Grosso, Brazil. July 2016
5. Course Determination of Latin American Staphylinidae. Lecturer: Angélico F. Asenjo (Ph.D)- UFMT, Brasil. Universidad del Cauca, 14-18 May 2018.
6. Summer course in “Systematics of Beetles 2018” University of Prague. Prague, Czech Republic. 8-21 de July 2018
7. Course of Biology and Ecology and Taxonomy of Colombian Scarabs (Coleoptera: Scarabaeoidea). 12-13 November 2020

OTHER STUDIES

1. Scientific visiting to Scarabaeiology Laboratory- Federal University of Mato Grosso, Brazil. May-July, 2014. Direct person in charge: Dr. Fernando Vaz-de-Mello Ph.D.
2. Scientific visiting at the Coleoptera area, curation of the *Dichotomius* genus, Natural History Museum London-NHML. London, United Kingdom. August - October 2017. Direct person in charge: Dr. Max Barclay Ph.D. (Coleoptera curator).
3. Doctoral Traineeship – ERASMUS. Monitoring and modelling the growth of forensic relevant flies (Diptera). Johann Wolfgang Goethe-Universität Frankfurt am Main, Institute of Legal Medicine. February – April 2022. Direct person in charge: Dr. Jens Amendt Ph.D.

PROJECTS PARTICIPATION

1. Administrative Department of Science, Technology and Innovation-Colciencias and Federación Colombiana de Ganaderos- FEDEGAN (Grant: 527-2011). Under- graduation Grant.
2. National Council for Scientific and Technological Development (CNPq) Grant: Protax/CNPq 440604/2015s0. Pos-graduation Grant.

3. Internal Grant Agency (IGA)- CZU (Prague): Larval morphology and developmental biology of Central European species of *Thanatophilus* (Coleoptera: Silphidae). IGA - Faculty of Environmental Sciences - CZU: 20194208. Research grant: 42110/1312/3159

4. Internal Grant Agency (IGA) - CZU (Prague): Intraspecific variability of thermal biology traits in *Thanatophilus sinuatus* (Coleoptera: Silphinae). IGA - Faculty of Environmental Sciences - CZU: 20194208. Research grant: 42110/1312/3145

5. University Grant Competition (UGC) - CZU (Prague): Unexplored aspects of insect mating behaviour: parasitic manipulations and necrophilous inclination in *Harmonia axyridis*. 71/2021. (Co-Investigator).

PROFESSIONAL EXPERIENCE

1. University of Valle- Assistant at the museum, Entomology.

2. GAIA FOUNDATION (Cali, Colombia)-Propuesta de declaratoria y formulación de plan de manejo para un área de bosque seco y subxerofítico de la cuenca del río grande, municipios de Restrepo, La Cumbre y Dagua, Valle del Cauca, Colombia-Inventario de coprófagos.

3. CIPAV FOUNDATION (Cali Colombia) – Project Ganadería Colombiana Sostenible (Colombian Sustainable Livestock)

4. Wildlife Conservation Society (WCS) Cali, Colombia- Inventario de escarabajos coprófagos. Monitoreo de escarabajos. Proyecto de Compensaciones por Perdida de Biodiversidad, San José del Nus, Antioquía.

5. CALIDRIS FOUNDATION- Monitoreo biológico de los escarabajos coprófagos presentes en las unidades de muestreo existentes en las siete cuencas seleccionadas en el marco del Convenio Especial de Cooperación para la Transferencia de Tecnología No. 084 de 2013 suscrito entre CVC y RARE, INC

6. CZECH UNIVERSITY OF LIFE SCIENCES – DOHODA O PROVEDENÍ PRÁCE. Laboratorní analýzy. Odborný vědecký pracovník projektu – 221360. (1.5.2021 – 31.12.2021)

7. CZECH UNIVERSITY OF LIFE SCIENCES – DOHODA O PROVEDENÍ PRÁCE. Odborný vědecký pracovník projektu 71/2021 (May 2021 – May 2022)

RESEARCH AREAS OF INTEREST

Natural Sciences - Biological Sciences -Entomology- Ecology- Forensic Sciences- Silphidae and Scarabaeinae Taxonomy- Carrion and Dung beetles diversity.

LANGUAGES: Spanish (native speaker), English, Portuguese.

REFEREE IN SCIENTIFIC JOURNALS

1. Revista Colombiana de Entomología (Colombian Journal of Entomology) – July 2018
2. European Journal of Taxonomy – June 2019; February 2021
3. Zootaxa – November 2020
4. Journal of Medical Entomology – July 2022
5. Biodiversity Data Journal – December 2022

PARTICIPATION CIENTIFIC EVENTS

1. **Name of the event:** IX Coloquio de insectos sociales –IUSSE 2013 Sección Bolivariana. **Cali, 21 al 24 de agosto de 2013**
2. **Name of the event:** II congreso Nacional de estudiantes de biología, Bogotá 28 de septiembre al 2 de Octubre de 2009
3. **Name of the event:** XX congreso Federación Latinoamericana de parasitología y XV congreso Asociación Colombiana de parasitología y medicina tropical. Bogotá 27 de septiembre al 1 de octubre de 2011
4. **Name of the event:** IUSSE Sección Bolivariana Bogotá 19, 20 y 21 de Agosto de 2009
5. **Name of the event:** Digital world conference of Forensic Entomology. September 15-18 of 2020

PRESENTATIONS IN CIENTIFIC EVENTS

1. **Name of the event:** XXIV congreso Brasileiro de Entomología. Curitiba, Brazil 16-20 September 2012. **Running title:** Diversidad de escarabajos coprófagos (Scarabaeidae: Scarabaeinae) en la cuenca del rio Dagua, Valle del Cauca, Colombia. Authors: **Santiago Montoya-Molina**; Lina Marcela Isaza-López; Guillermo Reina- Rodríguez; Carlos A. Cultid-Medina
2. **Name of the event:** III Congreso Colombiano de Zoología, Medellín, Colombia. **Running title:** División morfológica y variación del forrajeo de obreras de *Atta cephalotes* (Hymenoptera: Myrmicinae) Authors: Jonathan Rodríguez, Lina M. Isaza, **Montoya-Molina, Santiago**.
3. **Name of the event:** Congreso Sociedad Colombiana de Entomología (SOCOLEN 2014). Cali, Colombia 15 -18 August 2014 **Running title:** *Digitonthophagus gazella*: Especie introducida naturalizada en los sistemas ganaderos del valle del río cesar. 41 Congreso de la Sociedad Entomológica Colombiana. Authors: Giraldo, C. **Montoya-Molina, S.**, Escobar, F. Montoya-Lerma, J. & Chará, J.
4. **Name of the event:** Congress of the Entomological Society of America ESA 62ND Annual Meeting. November 2016 Portland, Oregon, EE.UU. **Running title:** Behavior of *Digitonthophagus gazella* and native dung beetles (Coleoptera: Scarabaeinae) in silvopastoral systems in the Caribbean region of Colombia. Authors: Giraldo, C., **Montoya-Molina, S.**, Montoya-Lerma, J., Chará, J. & Escobar, F.
5. **Name of the event:** Congreso Colombiano de Zoología, Simposio de escarabajos coprófagos. Cartagena, Colombia 1-5 December 2014. **Running title:** Escarabajos (Coleoptera: Scarabaeinae) en

tres fincas ganaderas, valle del río Cesar, Colombia. Authors: **Montoya Molina, Santiago**; Giraldo Echeverri, Carolina; Montoya-Lerma, James.

6. **Name of the event:** Congresso Brasileiro de Zoologia, Universidade Federal de Mato Grosso, Brasil: 03/2016 **Running title:** Interacciones del escarabajo introducido *Digitonthophagus gazella* (Coleoptera: Scarabaeinae) con los escarabajos nativos en el valle del río Cesar- Colombia. Authors: Giraldo-Echeverri Carolina, **S. Montoya-Molina**, Montoya-Lerma James, Chará J.

7. **Name of the event:** XI Reunión Latinoamericana de Scarabaeoidología. **Running title:** Distribución de las especies de los géneros neotropicales *Deltorhinum* Harold, 1869 y *Lobidion* Génier 2010. Authors: **S. Montoya-Molina**, F.A. González, F Z Vaz-de-Mello Universidad de Lavras, Brasil: 10/2016

8. **Name of the event:** Congresso Brasileiro de Entomologia, Gramado, Brazil, September 2018 **Running title:** Funciones ecológicas de los escarabajos coprófagos en paisajes Ganaderos del Valle del río Cesar, Colombia Authors: **Montoya-Molina, S.**, Giraldo-Echeverri, C., Montoya-Lerma, J.

9. **Name of the event:** Congresso Brasileiro de Entomologia, Gramado, Brazil, September 2018 **Running title:** Revisão taxonômica do grupo de espécies *Dichotomius (Luederwaldtinia) crinicollis* (Coleoptera: Scarabaeidae: Scarabaeinae). Authors: **Montoya-Molina, S.** & Vaz-de-Mello, F.Z.

10. **Name of the event:** European Association of Forensic Entomology – EAFE 2019 Meeting. June 2019. **Running title:** Developmental times of the forensically important carrion beetle *Thanatophilus sinuatus* at three constant temperatures. Authors: **Montoya-Molina, S.** Jakubec, P. & Ruzicka, J.

11. **Name of the event:** XXI International Congress of Entomology (ICE 2022). **Running title:** Times of development of the forensically important carrion beetle *Thanatophilus sinuatus* (Silphidae: Silphinae) at constant temperatures. Helsinki, Finland. Authors: **Montoya-Molina, S.** Jakubec, P. & Ruzicka, J.

12. **Name of the event:** European Association of Forensic Entomology – EAFE 2022 Meeting. **Running title:** Intraspecific variability of thermal biology in *Thanatophilus sinuatus* (Coleoptera: Silphidae). University of Alcalá, Madrid, Spain. Authors: **Montoya-Molina, S.**, Jakubec, P., Ipatová, I., Qubaiová, J., Novák.

13. **Name of the event:** European Association of Forensic Entomology – EAFE 2022 Meeting. **Running title:** Finding the best way to preserve larva. University of Alcalá, Madrid, Spain. Authors: Novák, M., Jakubec, P., Mahlerová K., **Montoya-Molina, S.**, Qubaiová, J. M. Ruzicka, J.

14. **Name of the event:** Ecology and Environmental Protection, XXII International Multidisciplinary Scientific GeoConference. Surveying, Geology and Mining, Ecology and Management - SGEM 2022. **Running title:** Biotope preferences of *Oiceoptoma thoracicum* (Coleoptera: Silphidae). Varna, Bulgaria. Authors: Jakubec, P., **Montoya-Molina, S.**, Qubaiová, J., Novák, M., Větrovská, M.

I. SCIENTIFIC PRODUCTION

1. Isaza-López, L.M., **Montoya-Molina, S.**, Giraldo-Echeverri, C., León- González, J., González-Alvarado, F.A. and Montoya-Lerma, J. 2015. Nuevos registros de distribución de *Digitonthophagus gazella* (Fabricius, 1787) (Coleoptera: Scarabaeinae) en Colombia. *Biota Colombiana*.
2. C. Giraldo-Echeverri; **S. Montoya-Molina**; K. Castaño; J. Montoya-Lerma; F. Escobar, J. Chará & E. Murgueitio. 2015. Sistemas silvopastoriles intensivos: Elementos claves para la rehabilitación de la función ecológica de los escarabajos del estiércol en fincas ganaderas del valle del río Cesar, Colombia. In: 3° Congreso Nacional de Sistemas Silvopastoriles - VIII Congreso Internacional de Sistemas Agroforestales, Argentina.
3. **Montoya-Molina, S**; Giraldo-Echeverri, C; Montoya-Lerma, J; Escobar, F; Chará, J. & Murgueitio, E. 2015. Diversidad de escarabajos coprófagos en sistemas silvopastoriles del Valle del río Cesar, Colombia. In: 3° Congreso Nacional de Sistemas Silvopastoriles - VIII Congreso Internacional de Sistemas Agroforestales, Argentina.
4. **Montoya-Molina, S.**, C. Giraldo-Echeverri, J. Montoya-Lerma, J. Chará, F. Escobar, Z. Calle. 2016. *Land sharing vs. land sparing in the dry Caribbean lowlands: A dung beetles' perspective*. *Applied Soil Ecology* 11/2015; 98. DOI:10.1016/j.apsoil. 2015.10.017
5. **Montoya-Molina, S.**, Isaza-López, L.M., León-González, J. 2016. Dung beetles (Scarabaeidae: Scarabaeinae) of the Dagua river basin, Valle del Cauca, Colombia. *Dugesiana*.
6. **Montoya-Molina, S.** & Vaz-de-Mello, F.Z. 2019. Notes on taxonomy and geographic distribution of *Deltorhinum* Harold 1869 (Coleoptera: Scarabaeidae: Scarabaeinae) with description of a new species, a new identification key, and a generic transfer. *Journal of Natural History*. DOI: 10.1080/00222933.2019.1606359
7. **Montoya-Molina, S.** & Vaz-de-Mello, F.Z. 2019. Rediscovering *Dichotomius foveicollis* (Kirsch, 1871) (Coleoptera: Scarabaeinae), new combination, revalidation and other taxonomic notes. *Journal of Natural History*. DOI: 10.1080/00222933.2020.1749322
8. Franco-Galindo, L.S., Ochoa-Sanz, D.M., Isaza-López, L.M. & **Montoya-Molina, S.** 2019. Preliminary list of coprophagous beetles (Coleoptera: Scarabaeinae) from the natural reserve Cañon del Rio Claro, Antioquia, Colombia. *Boletín del Museo de Entomología de la Universidad del Valle* 19(1): 21-27.
9. **Montoya-Molina S.** & Vaz-De-Mello F.Z. 2021. Taxonomic review of the *Dichotomius* (*Luederwaldtinia*) *agenor* species group (Coleoptera: Scarabaeidae: Scarabaeinae). *European Journal of Taxonomy* 734: 1–64. <https://doi.org/10.5852/ejt.2021>.
10. **Montoya-Molina, S.** P. Jakubec, J. Qubaiová, M. Novák, H. Šuláková, J. Růžička. 2021. Developmental models of the forensically important carrion beetle *Thanatophilus sinuatus* (Fabricius, 1775) (Coleoptera: Silphidae). *Journal of Medical Entomology* 58(3): 1041-1047. DOI: 10.1093/jme/tjaa255
11. **Montoya-Molina, S.** Arturo González-Alvarado, Carolina Giraldo-Echeverri, Fernando Z. Vaz-de-Mello. 2021. *Ateuchus fedescobari* – a new dung beetle (Coleoptera: Scarabaeinae) species from

Colombia, and redescription of the rare *A. punctatissimum* (Génier, 2010) from Brazil. *Journal of Natural History* 55 (1-2): 115-124. DOI: 10.1080/00222933.2021.1895348

12. Qubaiová, J., Jakubec, P., **Montoya-Molina, S.**, Novák, M. Šuláková, H. 2021. Influence of Diet on Development and Survival of *Thanatophilus rugosus* (Coleoptera: Silphidae). *Journal of Medical Entomology* 58(6): 2124-2129. DOI: 10.1093/jme/tjab141

13. **Montoya-Molina, S.** P. Jakubec, J. Qubaiová, M. Novák, H. Šuláková, J. Růžička. 2021. Developmental models of the carrion beetle *Thanatophilus rugosus* (Linnaeus, 1758) (Coleoptera: Silphidae). *Scientific Reports* 11(1): 19377. DOI: 10.1038/s41598-021-98833-9

14. Qubaiová, J., Jakubec, P., **Montoya-Molina, S.**, Novák, M., Suláková, H. 2022. Diet Impact on the Development and Survival of *Oiceoptoma thoracicum* (Coleoptera: Silphidae). *Journal of Medical Entomology*, 1-6.

15. Qubaiová, J., P. Jakubec, **S. Montoya-Molina**, M. Novák, H. Šuláková. 2023. The impact of diet and photoperiodism on the life history of *Thanatophilus sinuatus* (Coleoptera: Silphidae). *Journal of Medical Entomology*, 1-7.

16. Vacek Z, Cukor J, Vacek S, Václavík T, Kybicová K, Bartoška J, Mahlerová K, **Montoya-Molina S.** 2023. Effect of forest structures and tree species composition on common tick (*Ixodes ricinus*) abundance—Case study from Czechia. *Forest Ecology and Management*. 529: 120676. DOI: <https://doi.org/10.1016/j.foreco.2022.120676>

17. Giraldo–Echeverri, C., **Montoya–Molina, S.**, Montoya–Lerma, J., Chará, J.D., Escobar, F. Is *Digitonthophagus gazella* (Fabricius, 1787), undergoing a process of naturalization?: A study case in a tropical dry forest of northern Colombia. Has been successfully submitted online to *Caldasia Journal*.

18. Clavijo-Bustos, J., Cárdenas-Bautista, J.S. Torres, E.D., Torres, M.A., Neita-Moreno, J.C., **Montoya-Molina, S.** A new species of the *Dichotomius agenor* species-group (Coleoptera: Scarabaeidae: Scarabaeinae) from Colombia. Has been successfully submitted online to *Caldasia Journal*.

19. **Montoya-Molina, S.**, Jakubec, P., Awde D.N., Qubaiová, J. Age and sex drives the chill recovery times of a forensically important beetle, *Thanatophilus sinuatus* (Coleoptera: Silphidae). Has been successfully submitted online to *Journal of Medical Entomology*.

BOOKS

1. Giraldo–Echeverri, C.; **Montoya–Molina, S.** & Escobar, F. 2018. Escarabajos del estiércol en paisajes ganaderos de Colombia. Fundación CIPAV.