

## CURRICULUM VITAE

Gunilla Katarina Ståhls-Mäkelä

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### University of Helsinki Research database Tuhat website:

<https://tuhat.helsinki.fi/portal/en/persons/stahls>

### Academic titles

MSc 1989, Zoology, University of Helsinki

PhD 1999, Molecular Systematics of Syrphidae, University of Helsinki

Docent in Zoology 2008, University of Helsinki

**Languages:** Swedish (native), Finnish (very good), English (very good), German (fair).

### Professional appointments

Museum assistant and researcher, 1986-1998, Finnish Museum of Natural History, Dept. of Entomology

Coordinator of the Molecular Ecology and Systematics Laboratory (MES-lab), University of Helsinki, joint facility of Department of Ecology and Systematics and Finnish Museum of Natural History, 1.8.1999 – 15.10. 2001

Researcher in Finnish Ministry of Environment funded project (PUTTE): Diptera Cyclorrhapha Aschiza in Finland: Faunistic survey and Molecular Systematics, 2003 – 2007.

Laboratory coordinator/assistant of Molecular Systematics laboratory at the Finnish Museum of Natural History, 16.10.2001 – 2010.

Head of Molecular Systematics laboratory at the Finnish Museum of Natural History 2010 – , permanent position.

### Academic and professional activities

Editorial assistant, 1995-1997, Memoranda Societatis pro Fauna et Flora Fennica

Editor, 1998 -2000, Memoranda Societatis pro Fauna et Flora Fennica

Vice chairman, 1997 - 2015, Chairman 2016 - , Entomological Society of Helsinki

Reviewer of MSc and Ph.D. theses, taxonomy and systematics, Univ of Helsinki, 2006 – Member of Editorial Board, Annales Zoologici Fennici, 2009 –

Member of scientific Evaluation Panel, The Swedish Taxonomy Initiative, 2009 - 2014

External expert evaluator, The Norwegian Taxonomy Initiative, 2009 – 2012

Associate editor, Entomologica Fennica, 2015 -

### Partnership in International collaborative Research Projects

Partner, researcher of EU LIFE05 ENV/E/000302 (ECODIPTERA) 2005-08:

“Implementation of a management model for the ecologically sustainable treatment of pig manure using Diptera in the Region of Los Serranos, Valencia-Spain”.

Invited researcher 2011-15: *The POLLinators of the AEGean Archipelago: dIversity and threatS* (POL-AEGIS). THALES Programme, Funding: Greek Ministry of Education, long life learning and Religion. Budget: 600.000 e

PI, Researcher Exchange Programme (EU Horizon2020 RISE) 2015-2018, FlyHigh - Insect-plant relationships: insights into biodiversity and new applications. Budget: 450.000 e

### **Major stipendiary support for research (last years)**

2009, 2017 Carl Cedercreutz Foundation (Svenska kulturfonden) total 19 000 e

2012, 2014, 2016 Entomological Society of Helsinki, travel grants total 3800 e

### **Major congress attendance**

III – IX International Congresses of DipteroLOGY, 1994, 1998, 2002, 2010, 2014, 2018  
I - X International Symposia on Syrphidae organized bi-annually since 2001; 2001-2019  
International Congress on DNA barcoding, London, UK, February 2006; Leiden, 2007;  
South Africa, Kruger, December 2017

EDIT meeting “Future trends of Taxonomy”, Carvoeiro, Portugal, January 2008

11<sup>th</sup> International Congress on the Zoogeography, Ecology and Evolution of Eastern Mediterranean, Heraklion, Crete, Greece, September 2009

ECBOL3, Brussels, 17-20.9.2012

Global Genome Biorepository Network meeting, Berlin, June 2016

Global Genome Biorepository Network meeting, Vienna, May 2018

### **Institutional visits and international fieldwork**

Zoological Institute of the Siberian Branch of the Russian Academy of Science, Novosibirsk, 1990-1991, 2 months

University of Alicante, Spain, 1999 – 2006, duration altogether 6 months

Costa Rica, January 2005, fieldwork 2 weeks

Venezuela, January 2007, fieldwork 2 weeks

Eastern Aegean Islands, Greece, 2003-2015, fieldwork over 5 months

Spain, Sierra Nevada National Park 2014 & 2016, fieldwork 2 weeks

Russian Far East 2014, Khabarovsk and Vladivostok areas, fieldwork 2 weeks

South Africa, 2015-2018, fieldwork 4 months

Kenya, 2017, fieldwork 2 weeks, and Uganda 2018, fieldwork 2 weeks.

### **Supervision of students and mentoring**

Juha Laiho, University of Helsinki, MSc-thesis: Status and phylogenetic relationships of *Colias* butterflies (Lepidoptera) using molecular characters, 2004 - 2005.

Maria Faticov, University of Helsinki, MSc-thesis: The taxonomy and succession in associated *Coleoptera* and *Diptera* species in wood-decaying fungi *Pleurotus pulmonarius*. 2014-2015

Joaquin Mengual Sanchis, University of Alicante, Spain, co-supervised with Dr. Santos Rojo, University of Alicante, Spain: PhD-thesis: Molecular phylogeny of the subfamily Syrphinae (Diptera, Syrphidae), 2004 – May 2008.

Menno Reemer, University of Leiden, The Netherlands, co-supervised with Prof. E. Gittenberger, Leiden, The Netherlands. PhD-thesis: Taxonomy and Systematics of the subfamily Microdontinae (Diptera, Syrphidae), 2007 – March 2012.

Mentor for visiting postdoc Dr. Mirian Nunes Morales, University of Curitiba, Brasil, 15.9.2012-15.3.2013. Postdoc work: Phylogenetic relationships of the tribe Eristalini (Diptera, Syrphidae)

Sanja Veselić, University of Novi Sad, Serbia. Systematics of genus *Merodon* (Diptera, Syrphidae) based on morphological and molecular characters, 2015 - 2018. Co-supervised with Dr. Snezana Radenković, University of Novi Sad, Serbia.

Ljiljana Sasić, University of Novi Sad, Serbia. Molecular systematics of *Merodon aureus* group (Diptera, Syrphidae), 2015 - 2018. Co-supervised with Prof. Mihajla Dan, University of Novi Sad, Serbia.

### **Membership in PhD evaluation committees**

Member of PhD-assessment committee, student Rasmus Hovmöller, University of Stockholm, Sweden. PhD defence 20.3.2006.

Member of PhD evaluation committee of Pilar Hurtado Ascensio (Estudio del ciclo de vida de sirfidos eristalinos (Diptera, Syrphidae) y bases para su cría artificial), University of Alicante, Spain, PhD defence 1.3.2013.

Member of PhD-assessment committee of Eliana Ingrid Buenaventura, PhD-school of the Science Faculty at the Copenhagen University, Denmark (Phylogeny of flesh flies (Diptera, Sarcophagidae), PhD defence 20.3.2015.

Member of PhD-assessment committee, 1<sup>st</sup> opponent of the public defence and trial lecture of Xiaolong Lin, University of Trondheim, Norway. Title: Systematics and evolutionary history of *Tanytarsus* van der Wulp, 1874 (Diptera, Chironomidae). PhD defence 28.6.2017

Emma Wahlberg Lic. phil., opponent at public defence, University of Stockholm, Sweden. Title: Small animals and big subjects – diversity and molecular phylogeny of Empidoidea. Lic. phil. defence September 2017.

### **Membership in MSc evaluation committees**

Evaluation of MSc thesis of MSc student Anna Lempäinen, University of Helsinki, Finland [Mitochondrial DNA diversity of the Northern Bat (*Eptesicus nilssonii*) in the northern Palaearctic].

Evaluation of MSc thesis of MSc student Johanna Hopkins, University of Turku, Finland, (*Scolopendra morsitans* juoksujalkainen – laji vai lajikompleksi?) [*Scolopendra morsitans* – a species or a species-complex]

Evaluation of MSc thesis of MSc student Jani Järvi, University of Helsinki, Finland [Pest butterflies in the rice fields of South-East Madagascar – example species *Parapoynx stagnalis* and controversial *Parapoynx fluctuosalis*]

### **Publications in International refereed journals last years**

Vujić, A., Ståhls, G., & Radenkovic, S. (2018) Hidden European diversity: a new monotypic hoverfly genus (Diptera: Syrphidae: Eristalinae: Rhingiini). Zoological Journal of the Linnean Society 20: 1-24. <http://dx.doi.org/10.1093/zoolinnean/zly066>

Radenkovic, S., Velickovic, N., Ssymank, A., Vidakovic, D., Obreht Djan, M., Ståhls, G., Veselic, S., Vujić, A. (2018) Close relatives of Mediterranean endemo-relict hoverflies (Diptera, Syrphidae) in South Africa: Morphological and molecular evidence in the *Merodon melanocerus* subgroup. PLoS One. 13(7).

Radenković, S., Zorić, Sasic, L., Djan, M., Vidakovic Obreht, D., Acanski, J., Ståhls, G., Velickovic, N., Markov, Z., Petanidou, T., Tubic Kocis, N., Vujić, A. (2018) Cryptic speciation in the *Merodon luteomaculatus* complex (Diptera: Syrphidae) from the eastern Mediterranean. Journal of Zoological Systematics and Evolutionary Research, 56(2): 170-191

- Vujić, A., **Ståhls, G.**, Ačanski, J., Rojo, S., Pérez-Bañon, C., Radenković, S. (2018) Review of the *Merodon albifasciatus* Macquart species complex (Diptera Syrphidae): the nomenclatural type located and its provenance discussed. Zootaxa, 4374(1): 25-48. doi: 10.11646/Zootaxa.4374.1.2
- Pérez-Lachaud, G., Jahyny, B. J. B., **Ståhls, G.**, Rotheray, G., Delabie, J.H.B. & Lachaud, J-P (2017) Rediscovery and reclassification of the dipteran taxon *Nothomicrodon* Wheeler, an exclusive endoparasitoid of gyne ant larvae. Scientific Reports, 2017 (7): 45530. DOI: 10.1038/srep45530.
- Ståhls, G.** & Barkalov, A.V. (2017) Taxonomic review of the Palaearctic species of the *Cheilosia caerulescens*-group (Diptera, Syrphidae). Zookeys 662: 137-171.
- Tkoč, M., Tóthová, A., **Ståhls G.**, Chandler, P., Vanhara, L. (2017) Molecular phylogeny of flat-footed flies (Diptera: Platypezidae): main clades supported by new morphological evidence. Zoologica scripta, 46: 429-444. doi:10.1111/zsc.12222
- Šašić L, Ačanski J, Vujić A, **Ståhls G**, Radenković S, Milić D, et al. (2016) Molecular and Morphological Inference of Three Cryptic Species within the *Merodon aureus* Species Group (Diptera: Syrphidae). PLoS ONE 11(8): e0160001. doi:10.1371/journal.pone.0160001.
- Young, A.D., A.R. Lemmon, J.H. Skevington, X. Mengual, **G. Ståhls**, M. Reemer, K. Jordae, S. Kelso, E.M. Lemmon, M. Hauser, M. DeMeyer, B. Misof & B.M. Wiegmann (2016) Anchored enrichment dataset for true flies (order Diptera) reveals insight into the phylogeny of flower flies (family Syrphidae). – BMC Evolutionary Biology 16: 143.
- Ačanski, J., Vujić, A., Djan, M., Obreht Vidaković, D., **Ståhls, G.**, Radenković, S. 2016: Defining species boundaries in the *Merodon avidus* complex (Diptera, Syrphidae) using integrative taxonomy, with the description of a new species. European Journal of Taxonomy, [S.l.], n. 237, oct. 2016. ISSN 2118-9773. Available at: <<http://www.europeanjournaloftaxonomy.eu/index.php/ejt/article/view/361>>. Date accessed: 26 oct. 2016. doi:<http://dx.doi.org/10.5852/ejt.2016.237>
- Ståhls, G.**, Vujić, A., Petanidou, T., Cardoso, P., Radenković, S., Andric, J., Pérez Bañón, C. and Rojo, S. 2016: Phylogeographic patterns of *Merodon* hoverflies in the Eastern Mediterranean region: revealing connections and barriers. Ecology and Evolution, 6 (7): 2226-22245. DOI: 10.1002/ece3.2021.
- Vujić, A., Petanidou, T., Tscheulin, T., Cardoso, P. , Radenković, S., **Ståhls, G.**, Baturan, Ž., Mijatović, G., Rojo, S., Pérez-Bañón, C., Devalez, J., Andrić, A., Jovićić, S., Krašić, D., Markov, Z., Radišić, D., Tataris G. 2016: Biogeographical patterns of the genus *Merodon* Meigen, 1803 (Diptera: Syrphidae) in islands of the eastern Mediterranean and adjacent mainlands. Insect Conservation and Diversity, 9: 181-191. doi: 10.1111/icad.12156
- Pérez-Bañón S., Radenković S., Vujić A., **Ståhls G.**, Rojo S., Grković A., Petanidou T. 2016: *Brachyopa minima* (Diptera: Syrphidae), a new species from the Greek island of Lesvos with notes on the biodiversity and conservation of the genus *Brachyopa* Meigen, 1822. Zootaxa 4072: 217-234.
- Barkalov, A.V. & **Ståhls, G.** 2015: Descriptions of three new species of the genus *Cheilosia* Meigen from China (Diptera, Syrphidae). Zootaxa 3972 (2): 280–290.
- Faticov, M., **Ståhls, G.** & Schigel, D. S. 2015: A new trapping method for fungivorous insects. Mitteilungen der Schweizerischen Entomologischen Gesellschaft 88(1-2): 23-28.
- Ståhls, G.**, Miettinen, O. & Rättel, E. 2015: MtDNA COI in efficient use: clarifying taxonomy, linking morphologically discordant sexes and identifying the immature

- stages of *Agathomyia* Verrall flat-footed flies (Diptera: Platypezidae). *Journal of Zoological Systematics and Evolutionary Research*, 53(3): 219-238.
- Mengual, X., **Ståhls, G.** & Rojo, S. 2015: Phylogenetic relationships and taxonomic ranking of pipizine flower flies (Diptera: Syrphidae) with implications for the evolution of aphidophagy. *Cladistics*, 31: 491-508.
- Reemer, M., **Ståhls, G.** & Rätte, E. 2014: Host fungus of *Agathomyia sexmaculata* (Diptera: Platypezidae) and notes on breeding biology. *Sahlbergia*, 20(1), 36-41.
- Ståhls, G.**, Rätte, E. & Miettinen, O. 2014: New data on genus *Callomyia* of Finland (Diptera: Platypezidae). *Sahlbergia* 20: 9-12.
- Ståhls, G.** 2014: Checklist of the families Opetiidae and Platypezidae (Diptera) of Finland. *ZooKeys*, (441), 209-212. 10.3897/zookeys.441.7639
- Pastor, B., Martinez-Sanchez, A. S., **Ståhls, G.**, & Rojo, S. 2014: Introducing improvements in the mass rearing of the housefly: biological, morphometric and genetic characterization of laboratory strains. *Bulletin of Entomological Research*, 104(4), 486-493. 10.1017/S000748531400025X
- Haarto, A., & **Ståhls, G.** 2014: When mtDNA COI is misleading: congruent signal of ITS2 molecular marker and morphology for North European *Melanostoma* Schiner, 1860 (Diptera, Syrphidae). *ZooKeys*, (431), 93-134. 10.3897/zookeys.431.720.
- Francuski, L., Djurakic, M., Ludoski, J., Hurtado, P., Perez-Banon, C., **Ståhls, G.**, Milankov, V. 2014: Shift in Phenotypic Variation Coupled With Rapid Loss of Genetic Diversity in Captive Populations of *Eristalis tenax* (Diptera: Syrphidae): Consequences for Rearing and Potential Commercial Use. *Journal of Economic Entomology*, 107(2), 821-832. 10.1603/EC1324.
- Francuski, L., Djurakic, M., **Ståhls, G.** & Milankov, V. 2014: Landscape genetics and wing morphometrics show a lack of structuring across island and coastal populations of the drone fly in the Mediterranean. *Journal of Zoology*, 292(3), 156-169. 10.1111/jzo.12090
- Savolainen, E., Drotz, M. K., Saura, A., & **Ståhls, G.** 2014: *Baetis bundyae* (Ephemeroptera: Baetidae), described from Arctic Canada is found in northernmost Europe. *Canadian Entomologist*.
- Ståhls, G.** & Rätte, E. 2013: Genus *Microsania* (Platypezidae: Microsaninae) in Finland. *Sahlbergia* 19: 50-52.
- Morales, M. N., **Ståhls, G.**, & Hippa, H. 2013: Two new species of *Meropidia* Hippa & Thompson, 1983 (Diptera, Syrphidae) from the Andes Mountains. *ZooKeys*, (338), 55-65. 10.3897/zookeys.338.6093
- Milankov, V., Ludoski, J., Francuski, L., **Ståhls, G.** & Vujić, A. 2013: Genetic and phenotypic diversity patterns in *Merodon albifrons* Meigen, 1822 (Diptera: Syrphidae): evidence of intraspecific spatial and temporal structuring. *Biological Journal of the Linnean Society*, 110(2): 257-280. doi: DOI: 10.1111/bij.12127
- Reemer, M. & **Ståhls, G.** 2013: Generic revision and species classification of the Microdontinae (Diptera, Syrphidae) *Zookeys* 288: 1-213.
- Reemer, M. & **Ståhls, G.** 2013: Phylogenetic relationships of Microdontinae (Diptera: Syrphidae) based on molecular and morphological characters. *Systematic Entomology*, 38(4): 661-688. DOI: 10.1111/syen.12020
- Vujić, A., **Ståhls G.**, Ačanski, J., Bartsch H.†, Bygebjerg R., Stefanović, A. 2013: Systematics of Pipizini and taxonomy of *Pipiza Fallén*: molecular and morphological evidence (Diptera, Syrphidae). *Zoologica scripta* 42: 288-305.
- Vujić, A., Radenković, S., **Ståhls, G.**, Ačanski, J., Stefanović, A., Veselić, S., Andrić, A. & Hayat, R. 2012: Systematics and taxonomy of the *ruficornis* group of genus *Merodon* Meigen (Diptera: Syrphidae). *Systematic Entomology* 37: 578-602.

- Marcos-García, M.A., Vujić, A., Ricarte, A. & **Ståhls, G.** 2011: Integrated taxonomy of a species complex within *Merodon equestris* (Diptera: Syrphidae): description of a new species, with additional data on Iberian *Merodon*. *The Canadian Entomologist* 143: 332-348.
- Mengual, X., **Ståhls, G.** & Rojo, S. 2011: Is the mega-diverse genus *Ocyptamus* (Diptera, Syrphidae) monophyletic? Evidence from molecular characters including the secondary structure of 28S rRNA. *Molecular Phylogenetics and Evolution* 62: 191-205.
- Vujić, A., Radenković, S., **Ståhls G.**, Pérez-Bañón, C., Rojo, S. & Petanidou, T. 2011: Three new species of the genus *Merodon* Meigen, 1803 (Diptera: Syrphidae) from the island of Lesvos (Greece), in the eastern Mediterranean. *Zootaxa* 2735: 35-56.