



Curriculum Vitae

Sergei Tarasov

Research Web page <http://sergxf.wixsite.com/dungbeetles>

Google Citations <http://scholar.google.com/citations?user=CqTq-BkAAAAJ&hl=en>

Contact data

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Synthesis (NIMBioS)
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Research interests

- Systematics & phylogeny (morphology- and molecular-based) of Scarabaeinae dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae)
- Generic-level revision and development of new classification for Scarabaeinae
- Phylogenomics
- Cybertaxonomy
- Use of anatomy ontology for enhancing species descriptions and phylogenetic methods
- Development of new phylogenetic methods for trait evolution
- Patterns of evolution in Coleoptera and Insecta
- Evolutionary ecology of dung beetles

Education

- 2011 – 2016 *Ph.D. University of Oslo (Norway), Faculty of Mathematics and Natural Sciences.* Title of Ph.D. thesis: Morphology, fossils, and molecules elucidate the mystery of dung beetle (Coleoptera: Scarabaeidae: Scarabaeinae) evolution using novel Bayesian and parsimony approaches (available online at <https://www.duo.uio.no/handle/10852/48772>)
- 2005 – 2010 *M.Sc. & B.S. **Honors Diploma:** Kaluga State University (Russia), Faculty of Natural Science* (In Russia M.Sc. & B.S. are combined)

Professional Experience

- 2016 – present *Postdoctoral fellow. National Institute for Mathematical & Biological Synthesis (NIMBioS), University of Tennessee.* Project title: Modeling and exploring evolution of anatomy ontologies using innovative stochastic process and two focal groups of insects
- 2014 *Natural History Museum, University of Oslo,* part-time collection-based job for enhancing the collection of dung beetles at the Natural History Museum (Oslo)
- 2009-2011 *Research assistant: Natural History Museum of Denmark, University of Copenhagen.* Grant-based undergraduate intern at the Department of Entomology, with special duties in curation of Coleoptera collection
- 2007-2008 *Exchange Researcher: National University of Laos.* Biodiversity and systematics of Oriental Scarabaeinae and Aphodiinae

2005-2010 *Curator of Coleoptera collection: Kaluga State University, Russia.*

Languages

Russian (native language)	scientific German
English, Lao (fluent)	scientific Italian
Danish, Norwegian (basic)	taxonomic Latin

Honors and Awards

2014	Willi Hennig Award for the best student talk at the Willi Hennig Society meeting (Trento, Italy)
2011	Medal of the Russian Academy of Science for the best MSc research in Russia
2010	Nominated for or the Bernhard Rensch Prize for Biological Systematics
2009	The Best Student of the Year Award, Kaluga University
2006	Chizhevsky Award, Federal Agency of Education, Kaluga
2005	Youth of the Science Award, Federal Agency of Education, Obninsk
2004	Timofeev-Ressovsky Award, Federal Agency of Education, Kaluga

Grants

2016	NIMBioS short-term visitors support to bring my collaborators to National Institute for Mathematical and Biological Synthesis for working on joint project ~\$1,600
2016	NIMBioS, Postdoctoral Fellowship, \$104,000
2013	Synthesys Grant for visiting Natural History Museum in Paris \$3,500
2011	Quota scholarship for Ph.D. study at the Univ. of Oslo, funded by the Norwegian Government, \$57,000
2011	Martin Fellowship for the medium-term visit to Naturalis Biodiversity Center (Leiden), \$3,200
2011	EDIT grant to participate in Phylogenetic Systematics and Molecular Dating course, Copenhagen, Denmark, \$700
2010	Synthesys Grant for visiting Natural History Museum in Budapest, \$2,500
2009	Field Museum (Chicago, USA) Travel Grant, \$1,500
2009	Synthesys Grant for visiting British Museum, \$5,000
2009	Ernst Mayr Travel Grant in Animal Systematics \$1,500

Attended courses

2017	RevBayes workshop, NIMBioS, Tennessee, Knoxville
2013	Bodega Phylogenetic Course, organized by the University of California, Davis
2011	Phylogenetic Systematics Course at the Natural History Museum in Denmark, Copenhagen

Instructor at Workshops

2017	Phylogenetics for advanced high school students (Kaluga, Russia)
2017	Anatomy Ontology, Bayesian Networks, and Evo-Devo suggest a new framework for modeling discrete morphological characters (Evolution meeting, Portland)
2017	Morphology of Invertebrates: 3D imaging and novel approaches to Biosystematics, Natural History Museum, Vienna, Austria
2015	Identification of Dung Beetles, Federal University of Mato Grosso, Cuiaba, Brazil
2010	“Terrestrial Zoology” field course during at the University of Copenhagen

Mentoring

2017-present	Mentoring graduate student Anna Peterson (University of Tennessee, WiSTAR3 program)
2007-2008	Mentoring M.Sc. & B.S. students Bounpachan Bounthala, Kaison Silaphong (University of Laos)

Invited Talks

2014	X Reunión Latinoamericana de Scarabaeiología, Villa de Leyva, Colombia
2012	Natural History Museum of Denmark, University of Copenhagen
2012	Canadian National Collection of Insects, Arachnids, and Nematodes (CNC) of Agriculture and Agri-Food Canada
2011	Natural History Museum of Denmark, University of Copenhagen
2010	Natural History Museum of Denmark, University of Copenhagen

Media talks

2017	NIMBioS video interview, http://www.nimbios.org/videos/vid_tarasov
2014	Evolutionary history of dung beetles: unraveling the mystery. NRK channel, Norway, https://tv.nrk.no/serie/kunnskapskanalen/MDFP15003014/28-12-2014

Academic Activities

2015 – 2016	Coleopterists Society (student Councilor of the Society board)
2013 – 2016	<i>Zootaxa</i> , Scarabaeinae Section Editor
	<ul style="list-style-type: none"> Peer-review of scientific papers for <i>Systematics and Biodiversity</i>, <i>Tijdschrift Voor Entomologie</i>, <i>Zootaxa</i>, <i>Acta Entomologica Musei Nationalis Pragae</i>, <i>Cladistics</i> and <i>the Zoological Journal of the Linnean Society</i> The IUCN Red List of Threatened Species, species assessments of Oriental dung beetles

Professional Organizations and Affiliations

Society of Systematic Biologists	Entomological Society of America
Willi Hennig Society	Kaluga Society for Nature Research
Coleopterists Society	

Museum experience

Short or longer term research visits to the following collections:

2015	Federal University of Mato Grosso, Cuiaba, Brazil
2013	National Museum of Natural History, Paris, France
2012	Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa
2012	Canadian Museum of Nature, Ottawa
2012	South African National Collection of Insects, Pretoria
2012	Ditsong Museum, Pretoria, South Africa
2012	University of Pretoria, South Africa
2011	Hungarian Natural History Museum, Budapest
2010	The Field Museum, Chicago, USA
2010	Oxford University Museum of Natural History, Oxford, Great Britain
2010	Natural History Museum, London, Great Britain
2009	Royal Museum for Central Africa, Tervuren, Belgium
2009	Royal Belgian Institute of Natural Science, Brussels, Belgium
2009, 2011	National Museum of Natural History Naturalis, Leiden, The Netherlands
2009	National Museum of Natural History, Paris, France
2009	National Museum in Prague, Czech Republic
2009	Museum of Zoology, Lund University, Lund, Sweden
2009	Museum für Naturkunde in Berlin, Germany
2009	Deutsches Entomologisches Institut, Germany
2008	University of Khon Kaen, Zoological Museum Thailand
2005-2009	Zoological Museum of Moscow State University, Russia
2005-2009	Zoological Institute of Russian Academy of Science, Russia

Fieldwork

2014	Colombia, 1 week
2012	South Africa, 2 weeks
2011	Chile, 3 weeks
2011	Caucasus, Russia, 1 month
2010	Laos and Cambodia, 1 month
2007-2008	One-year field survey of Scarabaeidae in Indochina: multiple trips within Laos and Cambodia
2006	West Caucasus, Russia, 2 weeks
2006	Lower Volga, Russia 2 weeks
2004	West Caucasus, Russia, 1 month
2002	Lower Volga, Russia 3 weeks
2000-2006	Regular short and long-term field trips in the Central part of Russia (from 2 to 4 weeks each year)

LIST OF PUBLICATIONS

(total number 25)

- TARASOV S., MIKÓ I., YODER M.** ontoFAST: An R package for interactive, semi-automatic annotation of character matrices with biological ontologies. (*in preparation*)
- TARASOV S.** The scale-free nature of a morphological character: insights from gene regulatory networks. (*in revision*)
- TARASOV S.** Integration of anatomy ontologies and evo-devo using structured Markov chains suggests a new framework for modeling discrete phenotypic traits. (*in revision*), *preprint available at bioRxiv*, doi: <https://doi.org/10.1101/188672>
- TARASOV S. 2017.** A cybertaxonomic revision of the new dung beetle tribe Parachoriini (Coleoptera: Scarabaeidae: Scarabaeinae) and its phylogenetic assessment using molecular and morphological data. *Zootaxa*, 4329 (2): 101–149.
- TARASOV S., DIMITROV D. 2016.** Multigene phylogenetic analysis redefines dung beetle relationships and classification (Coleoptera: Scarabaeidae: Scarabaeinae). *BMC Evolutionary Biology*, 16:257.
- BREESCHOTEN T., DOORENWEERD C., TARASOV S., VOGLER A. 2016.** Phylogenetics and biogeography of the dung beetle genus *Onthophagus* inferred from mitochondrial genomes. *Molecular Phylogenetics and Evolution*, 105 (2016): 86-95.
- TARASOV S., VAZ-DE-MELLO F., KRELL F., DIMITROV D. 2016.** A review and phylogeny of Scarabaeine dung beetle fossils (Coleoptera: Scarabaeidae: Scarabaeinae), with the description of two *Canthochilum* species from Dominican amber. *PeerJ* 4:e1988.
- TARASOV S., GENIER F. 2015.** Innovative Bayesian and parsimony phylogeny of Dung Beetles (Coleoptera, Scarabaeidae, Scarabaeinae) enhanced by ontology-based partitioning of morphological characters. *PLoS ONE*, 10(3): e0116671.
- TARASOV S. 2013.** What one change would most improve work-life balance for scientists? *Science*, 342 (6154), online version (Letters: NextGen voices). <http://www.sciencemag.org/content/342/6154/36/suppl/DC1>
- SOLODOVNIKOV A., YUE Y., TARASOV S., AND REN D. 2013.** Extinct and extant rove beetles meet in the matrix: Early Cretaceous fossils shed light on the evolution of a hyperdiverse insect lineage (Coleoptera: Staphylinidae: Staphylininae). *Cladistics*, 29, 360-403.
- TAGLIAFERRI F., MORETTO PH., AND TARASOV S. 2012.** Essay on the systematics and phylogeny of the Afrotropical *Onthophagus* Latreille, 1802, belonging to d'Orbigny's seventh group. Description of a new subgenus and three new species (Coleoptera, Scarabaeoidea, Onthophagini). *Catharsius La Revue*, 6, 1-31 (in French)
- TARASOV S., KEITH D. 2011.** *Parachorius semsanganus* sp. n. (Coleoptera, Scarabaeidae, Scarabaeinae) from Laos and its significance in the phylogeny of Oriental Deltochilini. *Zookeys*, 11, 51-57.
- TARASOV S., SOLODOVNIKOV A. 2011.** Phylogenetic analyses reveal reliable morphological markers to classify mega-diversity in Onthophagini dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae). *Cladistics*, 27, 1–39.
- TARASOV S. 2010.** Seven new synonyms within the genus *Onthophagus* (Coleoptera: Scarabaeidae) from the Oriental Region. *Zootaxa*, 2566, 45–48.
- TARASOV S. KRIKKEN J. AND HUIJBREGTS J. 2010.** The Indochinese members of *Onthophagus* (*Parascatonomus*) *aurifex* species group (Coleoptera: Scarabaeidae), with description of a new species. *Zootaxa*, 2490, 63–68.

- TARASOV S. AND KABAKOV O.N. 2010.** Two new species of *Onthophagus* (Coleoptera: Scarabaeidae) from Indochina, with a discussion of some problems with the classification of *Serrophorus* and similar subgenera. *Zootaxa*, 2344, 17–28.
- TARASOV S. AND STEINER H. 2009.** The cave fauna of Laos. *The Bulletin of Kaluga University*. 1, 16-23. (in Russian)
- TARASOV S. 2008.** A revision of *Aphodius* Illiger, 1798 subgenus *Amidorus* Mulsant et Rey, 1870 with description of the new subgenus *Chittius* (Coleoptera: Scarabaeidae). *Russian Entomological Journal*. 17(2): 177-192.
- BAKANOV M.Yu. AND TARASOV S. 2008. The simple method of genital vials preparation. *Euroasian Entomological Journal*. 7(3): 279-280. (in Russian)
- TARASOV S. 2007. The role of coprophagous scarab beetles (Coleoptera: Scarabaeoidea) in the ecosystems: a case study of Kaluga region. 9th International Conference – Internas, Theses. 9: 175-178. (in Russian)
- ALEXEEV S.K. AND **TARASOV S. 2006.** The annotated checklist of scarab beetles (Coleoptera: Scarabaeidae) collected by the expedition of KSNR to Java, Indonesia. The Subfamilies: Scarabaeinae and Aphodiinae. *The Bulletin of Kaluga Society of Nature Research*. 7: 170-172. (in Russian)
- TARASOV S. 2005.** On the taxonomic status of *Onthophagus unxovi* Bogachev, 1930 (Coleoptera: Scarabaeidae). *Eurasian Entomological Journal*. 3: 157. (in Russian)
- TARASOV S. 2005.** The pastoral and recreation influence on scarab beetles (Coleoptera: Scarabaeidae). 9-aya mezhdunarodnaya shkola-konferenzia molodyh uchenyh biologiya nauka XXI veka, Puschino. 206. (in Russian)
- ALEXEEV S.K. AND **TARASOV S. 2005.** Coprophagous scarab beetles (Coleoptera: Scarabaeoidea) of south-east part of Kaluga area. *Kozel'skie kraevedchiskie chteniya*. 5-6: 223-224. (in Russian)
- ALEXEEV S.K. AND **TARASOV S. 2005.** Rare species of scarab beetles (Coleoptera: Scarabaeoidea) of south-east part of Kaluga area. *Kozelskie kraevedchiskie chteniya*. 5-6: 212-216. (in Russian)
- TARASOV S. 2004. The scarab beetles (Coleoptera: Scarabaeoidea) of Lower Volga. *Molodost'-nauke, Materialy oblastnoi nauchno-prakticheskoi konferenzii pamiati A.L. Chizhevskogo*. 3: 120-123. (in Russian)
- ALEXEEV S.K. AND TARASOV S. 2003. First data on scarab beetles (Coleoptera: Scarabaeidae) of "Kaluzhskie zaseki" Natural Reserve and adjacent lands. *Trudy zapovednika "Kaluzhskie zaseki"* 1: 104-107. (in Russian)

Book chapter

- ALEXEEV S.K. AND **TARASOV S. 2006.** *Scarabaeidae* Latreille, 1802 *In: The Red book of Kaluga province. Zolotaya Alleya*. pp. 294-301. (in Russian)