



**Dr. Alexei V. Tiunov**

e-mail: a\_tiunov@mail.ru

**Current Research Interests**

Functional ecology of soil communities. Trophic links and energy flow through detrital food webs. Biology of soil organisms in temperate and tropical forests. Engineering activity of soil animals. Dynamics of soil organic matter and nutrient limitation of micro- and macroorganisms. The use of stable isotopes in ecological research.

**Current position / address**

Head, Laboratory of soil zoology and general entomology  
A.N. Severtsov Institute of Ecology and Evolution  
Russian Academy of Sciences,  
Leninsky pr., 33  
119071 Moscow, Russia

**Professional preparation and Employment**

- 2014-present: Head of the Laboratory of Soil Zoology at the Institute of Ecology and Evolution RAS.
- 2007: Dr.Sc. in Ecology, Institute of Ecology and Evolution RAS ("Metabiotic interactions in soil community: the impact of earthworms on the structure and functioning of soil biota").
- 1997-2014: Leading scientific researcher at the Institute of Ecology and Evolution RAS.
- 1984-1997: Scientific researcher at the Institute of Ecology and Evolution RAS.
- 1993: PhD in Ecology, Institute of Ecology and Evolution RAS ("Earthworm activity and SOM transformation in soddy-podzolic soils").
- 1978-1983: Biology Department of Moscow State University.

**Supervision of master (diploma) and PhD students:**

Over 10 master students supervised at the Biology and Soil departments of the Moscow State University. Eight PhD students supervised at the Institute of Ecology and Evolution RAS. Since 2014: Permanent member of the Evaluation Board (PhD and Dr.Sc. degrees) at the Institute of Ecology and Evolution RAS.

### **Professional activities**

Editorial Board, *Pedobiologia* (2002 - present)  
Editorial Board, *Russian Journal of Ecology* (2015 - present)  
*Russian Journal of Ecosystem Ecology* (2016 – present)

### **Selected research grants**

2014-2016: Russian Science Foundation: “At the roots of life: the role of soil animals in dynamics of deep-soil carbon”.  
2002-2003: Alexander von Humboldt Foundation (Germany) fellowship: "Trophic links and energy flows at basal levels of soil food webs: The use of stable isotopes".  
2000-2001: Deutschen Forschungsgemeinschaft (Germany) and Russian Foundation for Basic research (Russia). Research project: "Effects of fluctuating temperature regimes on structure and functioning of soil systems".  
1996-1997: Volkswagenstiftung (Germany) research project: "Soil fauna and microflora in middens of *Lumbricus terrestris*: The contribution of microhabitats in biological diversity in deciduous forests".

**Publications:** over 100 publications in peer-reviewed journals. Selected publication:

Filser J., Faber J.H., Tiunov A.V., Brussaard L., Frouz J., De Deyn G., Uvarov A.V., Berg M.P., Lavelle P., Loreau M., Wall D.H., Querner P., Eijsackers H., Jiménez J.J. (2016) Soil fauna: key to new carbon models. *SOIL*, 2: 565-582.

Potapov A.A., Semenina E.E., Korotkevich A.Yu., Kuznetsova N.A., Tiunov A.V. (2016) Connecting taxonomy and ecology: trophic niches of collembolans as related to taxonomic identity and life forms. *Soil Biology and Biochemistry*, 101: 20-31.

Goncharov A.A., Tsurikov S.M., Potapov A.M., Tiunov A.V. (2016) Short-term incorporation of freshly fixed plant carbon into the soil animal food web: field study in a spruce forest. *Ecological Research*, 31: 923-933.

Zalewski M., Dudek-Godeau D., Godeau J.-F., Kujawa K., Sienkiewicz P., Tiunov A.V., Ulrich W. (2016) Trophic generalism at population level in ground beetles (Coleoptera: Carabidae). *The Canadian Entomologist*, 148: 284-293.

Potapov A.M., Tiunov A.V. (2016) Stable isotope composition of mycophagous collembolans versus mycotrophic plants: do soil invertebrates feed on mycorrhizal fungi? *Soil Biology and Biochemistry*, 93: 115-118.

Zalewski M., Dudek-Godeau D., Tiunov A.V., Godeau J.-F., Okuzaki Y., Ikeda H., Sienkiewicz P., Ulrich W. (2015) Wing morphology is linked to stable isotope composition of nitrogen and carbon in ground beetles (Coleoptera: Carabidae). *European Journal of Entomology*, 112: 810-817.

Tiunov A.V., Semenina E.E., Aleksandrova A.V., Tsurikov S.M., Anichkin A.E., Novozhilov Yu.K. (2015) Stable isotope composition ( $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  values) of slime molds: placing bacterivorous soil protozoans in the food web context. *Rapid Communications in Mass Spectrometry*, 29: 1465-1472.

- Kudrin A.A., Tsurikov S.M., Tiunov A.V. (2015) Trophic position of microbivorous and predatory soil nematodes in a boreal forest as indicated by stable isotope analysis. *Soil Biology and Biochemistry*, 86: 193-200.
- Korobushkin D.I., Gongalsky K.B., Tiunov A.V. (2014) Isotopic niche ( $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  values) of soil macrofauna in temperate forests. *Rapid Communications in Mass Spectrometry*, 28: 1303-1311.
- Potapov A.M., Semenina E.E., Kurakov A.V., Tiunov A.V. (2013) Large  $^{13}\text{C}/^{12}\text{C}$  and small  $^{15}\text{N}/^{14}\text{N}$  isotope fractionation in an experimental detrital foodweb (litter-fungi-collembolans). *Ecological Research*, 28: 1069-1079.
- Goncharov A.A., Tiunov A.V. (2013) Trophic chains in soil. *Biology Bulletin Reviews*, 4: 393-403.
- Tiunov A.V. (ed.) (2011). Structure and functions of soil communities of a monsoon tropical forest (Cat Tien National Park, southern Vietnam). Moscow, KMK Scientific Press, 277 pp. (in Russian).
- Tiunov A.V. (2007) Stable isotopes of carbon and nitrogen in soil ecological studies. *Biology Bulletin*, 2007, 34: 395-407.
- Hättenschwiler S., Tiunov A.V., Scheu S. (2005) Biodiversity and litter decomposition in terrestrial ecosystems. *Annual Review of Ecology, Evolution, and Systematics*, 36: 191-218.