

Alexey Shipunov, Ph.D.

A researcher, information scientist, educator, and a leader. Focused on bridging traditional botanical research with modern technology.

Skills include project management, data analysis, mentoring, securing financial opportunities and collections management.

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PROFESSIONAL EXPERIENCE

- Minot State University**, *Assistant Professor, Associate Professor* **2010–present**
Completed the flora of North Dakota research • Curated, catalogued, and expanded two-fold University herbarium collection • ebuilt and restructured local greenhouse to imitate a tropical rainforest and conservatory for rare plant species • With city and university, developed plans on flood recovery and tree conservation • Developed courses and textbooks on plant biology, data analysis, concepts of biology, and biogeography
- Marine Biological Laboratory**, Woods Hole, *Associate Researcher, Bioinformaticist* **2008–2010**
Successfully bridged Encyclopedia of Life tools and biological taxonomy
- University of Idaho**, *Postdoctoral Fellow* **2006–2008**
Strengthened the “novel weapons” hypothesis on the diversity of endophytic fungi in *Centaurea stoebe*
- Institute of Information Technologies**, Moscow, *Lecturer* **2004–2005**
Improved effectiveness of IT Adult Secondary Education courses • Developed education plans for sixteen new courses
- Kew Gardens**, London, *Postdoctoral Fellow* **2002–2003**
Applied new synthetic approach to evolution and temporal diversification of Eurasian orchids
- Moscow State University**, Higher Plants Department, *Lecturer* **1998–2002**
Developed plant biology course and textbook

EDUCATION

- Moscow State University**, Higher Plants, **Ph. D.**, 1998 • Plantains (genera *Plantago* L. and *Psyllium* Mill., Plantaginaceae) of European Russia and adjacent areas
- Moscow State University**, Higher Plants, **M. Sc.**, *magna cum laude*, 1990 • Knotweeds (*Polygonum aviculare* L. and allies) of Central Russia

AWARDS

Research grant, North Dakota INBRE (2014) • Research grant, Prairie Biotic Research, Inc. (2013) • Research grant from University of North Dakota (2012) • Research grant, Great Plains Center for Community Research and Service (2011) • Research grant, Norwegian Research Council (2006) • NSF/IGER research grant for the Center for Research on Invasive Species & Small Populations, CRISSP (2005) • Special Andrei Sakharov diploma (2005) • Research grant, Royal Society, UK (2003) • Excellence Award in Teaching Biology (1995)

AUTHORED PUBLIC DATABASES AND RESOURCES

- Atlas to the Trees and Shrubs of Minot State University* <http://www.natureatlas.org/plants/minot/>
- Biological Journals* <http://ashipunov.info/journals/>
- Flora of North Dakota: Checklist* <http://ashipunov.info/shipunov/fnddb/>
- Hemihomonyms Database* <http://ashipunov.info/shipunov/os/homonyms/>
- Introduction to Botany* and other textbooks <http://ashipunov.info/shipunov/school/textbooks.htm>
- North Dakota Ethnobotany Database* http://ashipunov.info/shipunov/fnddb2/nd_eth.htm
- Plant Images in Public Domain* <http://ashipunov.info/shipunov/ph/>
- Systema Angiospermarum* <http://ashipunov.info/shipunov/ang/ang-en.htm>
- Systema Naturae* <http://ashipunov.info/shipunov/os/os-en.htm>
- R books and software** <http://ashipunov.info/shipunov/software/r/r-en.htm>

PUBLICATIONS

219 publications in Russian and English in 1989–2018, including 71 peer-reviewed articles and 17 books (please see my [full CV](#) for the complete list). Most cited peer-reviewed articles are:

- Mushegian A., **Shipunov A.**, Elena S.F. 2016. Changes in the composition of the RNA virome mark evolutionary transitions in green plants. *BMC Biology*. 14: 68.
- Choi J., Lee H.J., **Shipunov A.** 2015. All that is gold does not glitter? Age, taxonomy, and ancient plant DNA quality. *PeerJ*. 3: e1087.
- Shipunov A.** 2015. *Plantago schrenkii* is *P. maritima*: morphological and molecular evidence. *Annales Botanici Fennici*. 52: 33–37.
- Volkova P., **Shipunov A.**, Borisova P., Moseng R., Ivens R. 2014. In search of hybridity: the case of Karelian spruces. *Silva Fennica*. 48: 1072.
- Volkova P., Kasatskaya S., Boiko A., **Shipunov A.** 2011. Stability of leaf form and size during specimen preparation of herbarium specimens. *Feddes Repertorium*. 121: 219–225.
- Shipunov A.**, Kosenko Y., Volkova P. 2011. Floral polymorphism in common primrose (*Primula vulgaris* Huds., Primulaceae) of the Northeastern Black Sea coast. *Plant Systematics and Evolution*. 296: 167–178.
- Shipunov A.**, Shipunova E. 2011. *Haptanthus* story: rediscovery of enigmatic flowering plant from Honduras. *American Journal of Botany*. 98: 761–763.
- Serebryanaya A., **Shipunov A.** 2009. Morphological variation of plants on the uprising islands of northern Russia. *Annales Botanici Fennici*. 46: 81–89.
- Newcombe G., **Shipunov A.**, Eigenbrode S.D., Raghavendra A.K.H., Ding H., Anderson C.L., Menjivar R., Crawford M., Schwarzländer M. 2009. Endophytes influence protection and growth of an invasive plant *Communicative & Integrative biology*. 2: 29–31.
- Shipunov A.**, Newcombe G., Raghavendra A.K.H., Anderson C.L. 2008. Hidden diversity of endophytic fungi in an invasive plant. *American Journal of Botany*. 95: 1096–1108.
- Volkova P., **Shipunov A.** 2008. Morphological variation of *Nymphaea* (Nymphaeaceae) in European Russia. *Nordic Journal of Botany*. 25: 329–338.
- Patterson D.J., Faulwetter S., **Shipunov A.** 2008. Principles for a names-based cyberinfrastructure to serve all of biology. *Zootaxa*. 1950: 153–163.
- Volkova P., Rudakova V., **Shipunov A.** 2007. Sex ratios in populations of *Geranium sylvaticum* in European Russia. *Plant Species Biology*. 22: 125–128.
- Volkova P., **Shipunov A.**, Elven E., Brochmann Ch. 2008. The seashore sedges of the Russian Kola Peninsula: How many species? *Flora*. 203: 323–333.
- Pillon Y., Fay M.F., Hedren M., Bateman R.M., Devey D., **Shipunov A.**, van der Bank M., Chase M.W. 2007. Evolution and temporal diversification of western European polyploid species complexes in *Dactylorhiza* (Orchidaceae). *Taxon*. 56: 1185–1208.
- Volkova P., Choob V., **Shipunov A.** 2007. The flower organ transition in water lily (*Nymphaea alba* s.l., Nymphaeaceae) under cross-examination with different morphological approaches. *Belgian Journal of Botany*. 140: 60–72.
- Pillon Y., Fay M.F., **Shipunov A.**, Chase M.W. 2006. Species diversity versus phylogenetic diversity: a practical study in the taxonomically difficult genus *Dactylorhiza* (Orchidaceae). *Biological Conservation*. 129: 4–13.
- Shipunov A.**, Bateman R.M. 2005. Geometric morphometrics as a tool for understanding *Dactylorhiza* (Orchidaceae) diversity in European Russia. *Biological Journal of Linnean Society*. 85: 1–12.
- Shipunov A.**, Fay M.F., Chase M.W. 2005. Evolution of *Dactylorhiza baltica* (Orchidaceae) from European Russia: evidence from molecular markers and morphology. *Botanical Journal of Linnean Society*. 147: 257–274.
- Shipunov A.**, Fay M.F., Pillon Y., Bateman R.M., Chase M.W. 2004. *Dactylorhiza* (Orchidaceae) in European Russia: combined molecular and morphological analysis. *American Journal of Botany*. 91: 1419–1427.