

# Curriculum Vitae

Alexey B. Shipunov

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## 1 Degrees

1998                      Ph. D. (Biology), Moscow State University.  
                                  Thesis title: Plantains (genera *Plantago* L. and *Psyllium* Mill.,  
                                  Plantaginaceae) of European Russia and adjacent territories  
                                  (advisor: Dr. Vadim Tikhomirov; reviewers: Dr. Vladimir Novikov, Dr.  
                                  Alexander Luferov)

1990 M. Sc. (Biology), Moscow State University.  
Thesis title: Knotweeds (*Polygonum aviculare* L. and allies) of Central Russia (advisor: Dr. Vadim Tikhomirov; reviewer: Dr. Vladimir Novikov)

## 2 Employment

2016–present Department of Biology, Minot State University (Minot, ND), Associate Professor

2010–2016 Department of Biology, Minot State University (Minot, ND), Assistant Professor

2008–2010 Marine Biological Laboratory, Woods Hole, Massachusetts, U.S., Associate Researcher with EOL (Encyclopedia of Life).

2006–2008 Idaho State University, Moscow, Idaho, U.S., Associate researcher.

2003–2006 Institute of Information Technologies, Lecturer.

2002–2003 Royal Botanic Gardens, Kew, Associate researcher.

1997–2002 Corporation “Small School”, Lecturer.

1992–2006 Moscow South-West High School, Lecturer, Specialist.

1995–1998 The department of higher plants of Moscow State University.

1992–1995 All-Russian Preparation Courses (VZPK), Chief of the biology department.

1990–1992 Moscow technical college No. 155, Lecturer in botany.

1989–1994 Cooperative “Prepare to College”, Lecturer in biology.

## 3 Teaching Experience

2016–present ***Machine Learning with R classes:***

2018 Machine learning with R for botanists: workshop on Botany 2018 conference (Rochester, Minnesota)

2017 Machine learning with R for botanists: workshop on Botany 2017 conference (Fort Worth, Texas)

2017 Machine learning with R for biologists: workshop on 2017 annual North Dakota INBRE symposium (Grand Forks, ND)

2010–present

***Teaching classes in Minot State University:***

2013–present Biogeography (original, with a Tropical Biology laboratory part built in the connection with the field trip to tropics)

[http://ashipunov.info/shipunov/school/biol\\_330](http://ashipunov.info/shipunov/school/biol_330)

2012–present Concepts of Biology (original, taught as a history of life course)

[http://ashipunov.info/shipunov/school/biol\\_111](http://ashipunov.info/shipunov/school/biol_111)

2012–present Biometry (original, based on the original textbook)

[http://ashipunov.info/shipunov/school/biol\\_240](http://ashipunov.info/shipunov/school/biol_240)

2011–present Systematic Botany (original, taught as a field botany course)

[http://ashipunov.info/shipunov/school/biol\\_448](http://ashipunov.info/shipunov/school/biol_448)

2011–present Ethnobotany (original)

[http://ashipunov.info/shipunov/school/biol\\_310](http://ashipunov.info/shipunov/school/biol_310)

2011–2012 Working with Organisms in the Classroom. Plants

[http://ashipunov.info/shipunov/school/biol\\_592](http://ashipunov.info/shipunov/school/biol_592)

2011–2013 Advanced Cell Biology

[http://ashipunov.info/shipunov/school/biol\\_250](http://ashipunov.info/shipunov/school/biol_250)

2010–present Introduction to Botany (based on the original textbook)

[http://ashipunov.info/shipunov/school/biol\\_154](http://ashipunov.info/shipunov/school/biol_154)

2017–present Computer literacy for biology majors

[http://ashipunov.info/shipunov/school/univ\\_110](http://ashipunov.info/shipunov/school/univ_110)

2007

Teaching Dendrology in the University of Idaho  
(<http://www.uidaho.edu/cnr/>)

2003–2005	Teaching computer methods in science in the Moscow Institute of Information Technologies ( <a href="http://www.ekurs.ru/">http://www.ekurs.ru/</a> )
1997–2002	<b><i>Teaching classes in Moscow State University:</i></b>
	2000–2001 Contemporary methods in flowering plants systematics
	1998 General Biology. Botany
	1998–2002 Mathematical methods in plant systematics
	1997 Morphology of plants
1992–present	<i>Mentoring</i> high school, undergraduate and graduate students, most of them co-authored publications (see below)
2002	Principal of “Malaya Shkola”
1997–2002	Teaching biology courses in “Malaya Shkola” school ( <a href="http://smallschool.ru/">http://smallschool.ru/</a> )
1993–1995	Worked on the editorial board of the “Repetitor” educational journal (Moscow, Russia)
1992–present	Teaching general biology and botany courses in Moscow South-West High School ( <a href="http://www.1543.ru/">http://www.1543.ru/</a> , <a href="http://www.bioclass.ru/">http://www.bioclass.ru/</a> ). Organized scientific expeditions and summer practices, supervised students’ scientific research.
1990–1992	Teaching botany and dendrology in Moscow Technical College #155.
1989–1994	Teaching general biology courses and preparing textbooks for All-Russian Preparation Courses (“VZPK”, Moscow, Russia).
1989–1992	Teaching biology courses in college “Gotovim v VUZ” (Moscow, Russia)
1985–2002	Teaching biology and preparing textbooks for the Open College “VZMSh” ( <a href="http://www.vzms.ru/">http://www.vzms.ru/</a> ).
1982–present	Organization and management of Moscow Biology Olympiad for High Schoolers at the Moscow State University. Member of the Panel of Judges from 1990, vice-chairman of the Panel from 2002.

## 4 Awards and Funding

2014	Research grant from North Dakota INBRE/NIH
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2013	Research grant from Prairie Biotic Research, Inc.
2012	Research grant from University of North Dakota
2011, 2013–2016	Small research grants from Minot State University
2011	International Initiative Grant from Minot State University
2011	Research Grant from Great Plains Center for Community Research and Service
2011–2012	Pilot research grant from North Dakota INBRE/NIH
2006	Research grant from Norwegian Research Council
2005	NSF/IGER research grant for the Center for Research on Invasive Species & Small Populations (CRISSP)
2005	Testimonial Letter from Moscow Department of Education
2005	Special Diploma of A. Sakharov Conference
2003	Research grant from Royal Society, United Kingdom
2001	Winner of “Moscow Grant” Awards
1995	George Soros Grant in Teaching Biology

## 5 Research Interests

### Geography and Evolution of Plants

2010–present	Geography and evolution of boxwoods and allies (Buxineae), chokecherries ( <i>Aronia</i> , Rosaceae) and tropical American Picramniaceae. Molecular study is ongoing.
1994–present	Geography, biology and diversity of plantains (Plantagineae tribe). Prepared the critical review of the species of the genera <i>Plantago</i> and <i>Littorella</i> of the European Russia. Review of the Plantagineae for the volume XVII of the “Flora of North America” is in press. Molecular study of the whole tribe is ongoing.
1994–2014	Flora of Northern and Middle Russia and Caucasus. Studied evolution and geography of plants on small islands of Russian White Sea. Researched evolution of the <i>Carex salina</i> hybrid complex; cataloged vascular plants of the Guba Tchupa and Dalnie Zelentsy regions; conducted a comparative study of flora of Guba Kiv islands and lakes in this region. Cataloging vascular plants of lake Moldino environs. Studied multi-colored primrose ( <i>Primula vulgaris</i> ) geography and evolution; the diversity of Caucasus and Crimea ivy ( <i>Hedera</i> ) species; composed a textbook with description key of the spring flora of Black Sea coast.

- 2002–2015 Evolution, geography and conservation biology multiple plant groups including: knotweeds (*Polygonum*), spruces (*Picea*), alders (*Alnus*) and dactylorhizids (*Dactylorhiza*) of European Russia. Developed and studied microsatellite and polymorphic fragments markers, determined origin, geographical patterns and possible maternal parents of allopolyploids; employed simultaneous analysis of morphometric and molecular data and geometric morphometry analyses.
- Structure and Behavior of Plants**
- 1998–2008 Behavior of plants, with the emphasis on carnivorous sundews (*Drosera*) and “biological clock” water-lilies (*Nymphaea*) investigated employing the unique method of continuous observations. Geography and diversity of these plants were also studied.
- Biodiversity Informatics**
- 2011–present Flora of North Dakota. Comprehensive illustrated checklist. Minot State University herbarium (MISU) significantly improved, databased, geo-referenced and imaged with intravital photographs. North Dakota ethnobotany database ([http://ashipunov.info/shipunov/school/biol\\_310/nd\\_ethnobotany.htm](http://ashipunov.info/shipunov/school/biol_310/nd_ethnobotany.htm)).
- 1994–present Global taxonomy databases. Participated in the “Encyclopedia of Life” project. Hemihomonyms database (<http://ashipunov.info/shipunov/os/homonyms>) has been created in 2010 and continuously updated since. Original classifications of living organisms (<http://ashipunov.info/shipunov/os>) has been made (1995) and constantly updated since. Taxonomy of anamorphic fungi was studied; numerous new fungal lineages of anamorphic ascomycetes were described, and more than 100 sequences are submitted to GenBank. Original classification of flowering plants (<http://ashipunov.info/shipunov/ang>) has been made (1991) and constantly updated since. Two new plant families were described.

## 6 Publications

### Peer-Reviewed Articles

- [1] Hassemer G., Shipunov A., Roensted N., Meudt H. Taxonomic and geographic novelties in the genus *Plantago* (Plantaginaceae) in Chile, including the description of a new species. *Phytotaxa*. 340: 137–156. <https://doi.org/10.11646/phytotaxa.340.2.3>
- [2] Shipunov, A. 2017. Portion of Plantaginaceae, the Plantain Family: *Littorella* and *Plantago*. Online edition. In: R.F.C. Naczi, J. R. Abbott, and Collaborators, *New Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, compiled in 2016, 2017. NYBG Press, New York. <http://dx.doi.org/10.21135/893275471.060>
- [3] Shipunov, A. 2017. Buxaceae, the Boxwood Family. Online edition. In: R.F.C. Naczi, J. R. Abbott, and Collaborators, *New Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, compiled in 2016, 2017. NYBG Press, New York. <http://dx.doi.org/10.21135/893275471.041>
- [4] Logacheva M., Shipunov A. Phylogenomic analysis of *Picramnia*, *Alvaradoa*, and *Leitneria* supports the independent Picramniales. *Journal of Systematics and Evolution*. 2017. 55: 171–176. [doi:10.1111/jse.12246](https://doi.org/10.1111/jse.12246)
- [5] Doweld A.B., Shipunov A. Proposal to reject the name *Plantago indica* (Plantaginaceae). *Taxon*. 2017. 66: 205–206. [doi:10.12705/661.25](https://doi.org/10.12705/661.25)
- [6] Volkova P.A., Vinogradova T.A., Kopylov-Gyskov Yu.O., Lyskov D.F., Petrov P.N., Shipunov A.B. Results of ten years monitoring of population status of *Epipogium aphyllum* (F.W. Schmidt) Sw. on the Asafij island (Kandalaksha Gulf of the White Sea). *Phytodiversity of East Europe*. 2016. 10: 4.
- [7] Shipunov A. *Plantago* and *Littorella*. In: Freeman, C. and Rabeler R. (eds.) *Flora of North America*. Volume XVII. Oxford University Press, New York and Oxford. In press.
- [8] Mushegian A., Shipunov, S.F. Elena. Changes in the composition of the RNA virome mark evolutionary transitions in green plants. *BMC Biology*. 2016. 14: 68. [doi:10.1186/s12915-016-0288-85](https://doi.org/10.1186/s12915-016-0288-85)
- [9] Shipunov A., P. Efimov “Northern tetraploids” clarified: a study of dactylorhizids (*Dactylorhiza*, Orchidaceae) from the North European Russia. *Flora*. 2015. 215: 40–45. [doi:10.1016/j.flora.2015.07.005](https://doi.org/10.1016/j.flora.2015.07.005)
- [10] Choi J., H. J. Lee, A. Shipunov. All that is gold does not glitter? Age, taxonomy, and ancient plant DNA quality. *PeerJ*. 2015. 3: e1087. [doi:10.7717/peerj.1087](https://doi.org/10.7717/peerj.1087)

- [11] Oskolski A., M. von Balthazar, Y. Staedler, A. Shipunov. Inflorescence and Flower Morphology of *Haptanthus hazlettii* (Buxaceae, Buxales). Botanical Journal of Linnean Society. 2015. doi:10.1111/boj.12303
- [12] Shipunov A., K. A. Yurkonis, J. C. La Duke, and V. L. Facey. Vascular Plants of Forest River, North Dakota. Prairie Naturalist. 2015 47(1): 29–35.
- [13] Shipunov, A., L. Abramova, J. Beaudoin, J.H. Choi, D. Fry, R. Perry, V. Shipunova, J. Schumaier, and J. Theodore. 2015. Flora of North Dakota project. Phytoneuron 2015–16: 1–10.
- [14] Shipunov, A. *Plantago schrenkii* is *P. maritima*: morphological and molecular evidence. Ann. Bot. Fennici. 2015. 52: 33–37.
- [15] Shipunov A., Abramova L. Islands in lakes and the sea: how do they differ? European Journal of Environmental Sciences. 2014. 4: 112–115. <http://www.ejes.cz/index.php/ejes/article/view/170/81>
- [16] Ivanova A. A., Kopylova-Guskova E.O., Shipunov A. B., and Volkova P. A. Post-fire succession in the northern pine forest in Russia: a case study. Wulfenia. 2014. 21: 119–128.
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- [18] Shipunov A. We need at least two baskets for our eggs: PDF alone is not enough for e-publication. Taxon. 2014. 63: 134–135.
- [19] Shipunov A., P. Volkova, L. Abramova, P. Borisova. Lost and found: short-term dynamics of the flora on 100 small islands in the White Sea. Acta Oecologica. 2013. Vol. 52. P. 50–56.
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- [21] Shipunov A. “Biological systematics: Evolution of ideas”. Book review. Systematic Biology. 2012. 61: 546–547. doi:10.1093/sysbio/syr125.
- [22] Shipunov A. The problem of hemihomonyms and the on-line hemihomonyms database, HHDB. Bionomina. 2011. 4: 65–72.
- [23] Volkova P.A., Kasatskaya S.A., Boiko A.A., Shipunov A.B. Stability of leaf form and size during specimen preparation of herbarium specimens. Feddes Repertorium. 2011. 121: 219–225.
- [24] Shipunov A., Kosenko Ya., Volkova P. Floral polymorphism in common primrose (*Primula vulgaris* Huds., Primulaceae) of the North-Eastern Black Sea coast. Plant Systematics and Evolution. 2011. 296 (3–4): 167–178.



- [25] Shipunov A., Shipunova E. *Haptanthus* story: rediscovery of enigmatic flowering plant from Honduras. *American Journal of Botany*. 2011. 98: 761–763.
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- [27] Shipunov, A.B. To the question of *Cannabis* L. taxonomy. Theory and practice of forensic enquiry. 2010. N 3 (19). P. 128–130. [In Russian].
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- [31] Serebryanaya A., Shipunov A. Morphological variation of plants on the uprising islands of northern Russia. *Annales Botanici Fennici*. 2009. 46(2): 81–89.
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- [36] Volkova P. A., Shipunov A. B. Morphological diversity of water-lilies (*Nymphaea* L., Nymphaeaceae) of European Russia. *Nordic Journal of Botany*. 2008. 25: 329–338.
- [37] Newcombe G., A. Raghavendra, A. Shipunov, S. Eigenbrode, C. Anderson, M. Schwarzlaender, T. Prather. Fungal endophytes in spotted knapweed: Do they affect its invasiveness? In: Harrington, Timothy B.; Reichard, Sarah H., tech. eds. 2007. Meeting the

challenge: invasive plants in Pacific Northwest ecosystems. Gen. Tech. Rep. PNW-GTR-694. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. P. 47–49.

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- [39] Volkova P. A., Choob V. V., and A.B. Shipunov. The flower organ transition in water-lily (*Nymphaea alba* L. s.l., Nymphaeaceae) under cross-examination with different morphological approaches. *Belgian Journal of Botany*. 2007. Vol. 140. N. 1. P. 60–72.
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- [43] Ilinsky V. V., Shipunov A. B. The analysis of the variability of different alder species (*Alnus* Mill., Betulaceae) by classic and geometric morphometrics. *Botanical Journal*. 2005. N. 11. P. 1720–1733. [In Russian, English abstract].
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- [45] Shipunov A.B., Abramova L.A. Floristic changes on the Kem-Ludy islands (Russian White Sea, 1962–2004). *Bull. Moscow Soc. Natur. Biol. Ser.* Vol. 111. N. 1. P. 45–56. [In Russian, English abstract]
- [46] Shipunov A. B. Families Cannabaceae, Linaceae, Lobeliaceae, Menyanthaceae, Plantaginaceae, Polemoniaceae, Scrophulariaceae, Solanaceae, Verbenaceae. In: Majevsky P. F. *Flora of Middle Russia*, 10 ed. Moscow, 2006. KMK Press. 600 pp. [In Russian].

- [47] Pillon Y., M. F. Fay, M. Hedren, R. M. Bateman, D. Devey, A. B. Shipunov, M. van der Bank, M. W. Chase. Evolution and temporal diversification of western European polyploid species complexes in *Dactylorhiza* (Orchidaceae). *Taxon*. 2007. Vol. 56. N. 4. P. 1185–1208.
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- [50] Shipunov A. B., M. F. Fay, M. W. Chase. Evolution of *Dactylorhiza baltica* (Orchidaceae) from European Russia: evidence from molecular markers and morphology. *Bot. J. Linn. Soc.* 2005. Vol. 147. N. 3. P. 257–274.
- [51] Volkova P.A., Shipunov A.B. The behavior of *Drosera rotundifolia* L. (Droseraceae) trapping leaves in natural habitats. *International Carnivorous Plants Newsletter*. 2005. Vol. 34. N. 1. P. 7–15.
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## Books

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## 7 Attended Symposia

- 2018 XII Congreso Latinoamericano de Botanica. 21–28 Octubre 2018. Quito, Ecuador (oral presentation)
- 2018 Botany 2018. Rochester, Minnesota, July 21–25, 2018 (poster presentation)
- 2018 North Dakota Academy of Science. 109th Annual meeting. Minot, North Dakota (poster presentation).
- 2017 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (poster presentation).
- 2017 XIX International Botanical Congress. July 17–21, 2017. Shenzhen (oral and poster presentations).
- 2017 Botany 2017. Fort Worth, Texas, June 24–28, 2017 (poster presentation)
- 2017 North Dakota Academy of Science. 108th Annual meeting. Fargo, North Dakota (poster presentation).
- 2016 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (poster presentation).
- 2016 Botany 2016. Savannah, Georgia (oral presentation).

- 2016 Indigenous Plant Use Forum (IPUF). 19th Annual Conference. Port St. Johns, Eastern Cape, South Africa (oral presentation).
- 2016 North Dakota Academy of Science. 107th Annual meeting. Fargo, North Dakota (oral presentation).
- 2015 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (poster presentation).
- 2015 Botany 2015. Edmonton, Alberta, Canada (poster presentation).
- 2014 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (poster and oral presentation).
- 2014 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (poster presentation).
- 2014 Botany 2014. Boise, Idaho (poster and oral presentation).
- 2014 North Dakota Academy of Science. 106th Annual meeting. Valley City, North Dakota (oral presentation).
- 2013 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (poster presentation).
- 2013 Botany 2013. New Orleans, Louisiana (oral presentation).
- 2013 North Dakota Academy of Science. 105th Annual meeting. Grand Forks, North Dakota (oral presentation).
- 2012 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (poster presentation).
- 2012 Botany 2012. Columbus, Ohio (two oral presentations).
- 2012 North Dakota Academy of Science. 104th Annual meeting. Bismarck, North Dakota (oral presentation).
- 2011 North Dakota INBRE Annual Symposium. Grand Forks, North Dakota (two poster presentations).
- 2011 Northwest Rural Consortium 2011 Meeting. Minot, North Dakota (oral presentation).
- 2011 XVIII International Botanical Congress. Melbourne, Australia (oral presentation).
- 2011 Botany 2011. St. Louis, Missouri (oral presentation).
- 2010 Botany 2010. Providence, Rhode Island (poster presentation).
- 2009 Towards building code compliance within biodiversity informatics. The Systematics Association 7th Biennial Meeting. Leiden, Holland (oral presentation).

- 2008 Updating the Linnaean Heritage: Names as tools for thinking about animals and plants. Padua, Italy (participant).
- 2008 “Nomina 2” workshop. Woods Hole, Massachusetts (organization).
- 2007 Plant Biology and Botany 2007. The Joint Congress of ASPB, BSA, ASPT and AFS. Chicago, Illinois (two oral presentations).
- 2007 Idaho Weed Conference. Idaho Weed Control Association. Nampa, Idaho (oral presentation).
- 2006 Botany 2006. The Annual Meeting of BSA, ASPT, AFS and ABL. California State University, Chico (two posters and oral presentation).
- 2006 VI Scientific Symposium about flora of Middle Russia. Tver (poster presentation).
- 2005 XVII International Botanical Congress. Vienna, Austria (three posters).
- 2005 Study of the flora of East Europe: Achievements and prospects. St.-Petersburg (poster presentation).
- 2004 Fundamental problems of botany and botanical educations: problems and perspectives. International Conference. Moscow (poster presentation).
- 2003 The Systematics Association 4th Biennial Meeting. Trinity College, Dublin (poster presentation).
- 2003 International Polyploidy Conference, London (poster presentation).
- 2003 IV scientific session of Marine Biological Station of Saint-Petersburg State University. St. Petersburg (poster presentation).
- 2003 XI International Conference of Plant Phylogeny. Moscow (poster presentation).
- 2003 Apiales 2003. Symposium of University of Pretoria, Pretoria, South Africa (poster presentation).
- 2002 International conference “Ecological botany: science, education and applied aspects”. Syktyvkar (poster presentation).
- 2002 N. A. Pertzov Conference. White Sea Biological Station of Moscow State University (poster presentation).
- 2002 Conference of young botanists-scientists of Ukraine. Lviv (poster presentation).
- 2002 III scientific session of Marine Biological Station of Saint-Petersburg State University. St. Petersburg (poster presentation).

- 2002 International scientific conference on systematics of higher plants. Moscow (lectures, seminar presentation).
- 2001 Scientific and educational resources in Moscow State University. Moscow (poster presentation).
- 2001 Population, ecosystem and evolution. All-Russian seminar. Kazan (poster presentation).
- 2001 Information technology in biodiversity research. 2nd International Symposium. St. Petersburg (poster presentation).
- 2001 IX Workshop on theoretical plant morphology “Types of similarities and principles of the homologies revealed in plant morphology”. St. Petersburg (poster presentation).
- 2001 Floristic Researches in Central Russia. Conference. Rjazan (poster presentation).
- 2000 International conference in memory of A. A. Uranov. Moscow (oral presentation).
- 2000 X Moscow Meeting of Plants Phylogeny (poster presentation)
- 1999 VI International Conference on the Morphology of the Plants in Memory I. G. and T. I. Serebryakovs (poster presentation)
- 1997 Puschino-na-Oke winter school on plant morphology. Puschino-na-Oke (poster presentation)
- 1997–2006 Multi-Subjects Winter Schools in Puschino-na-Oke, organized by Moscow South-West High School. Puschino-na-Oke (lectures and seminars).
- 1994–1996 Puschino-na-Oke winter schools of plant cell biology. Puschino-na-Oke (lectures)
- 1994, 1995 Seminar for the teachers of biology in Obninsk, organized by “Alta” company. Obninsk (lectures)
- 1996 IX Moscow Meeting of Plants Phylogeny (poster presentation)
- 1992 VIII Moscow Meeting of Plants Phylogeny (poster presentation)
- 1989 Seminar for the teachers of biology in Kaluga (lecture)
- 1984, 1985 All-Russian undergraduate student Olympics in biology (participant)

## 8 Developing

### Computer Experience

OS Linux, MS Windows 3.11–10, Mac OS 9/X

Programming	C, Fortran, T <sub>E</sub> X(developer), Perl (developer), Python, PHP, JavaScript, S, UNIX shells (developer), sed, AWK
Data analysis	R (developer), S-PLUS, SPSS, Statgraphics, STATISTICA, Stadia, tpsRelw, NTSYSpc, Past <i>etc.</i>
Taxonomy	PAUP, PHYLIP, WinClada, MacClade, MrBayes, Mesquite, RAxML, and many others
DNA sequencing	Autoassembler, CLUSTAL, Sequence Navigator, Sequencher, VectorNTI, Staden, and many others
Databasing	MySQL, PostgreSQL, SQLite, MS Access

## Software made

**My Github:** <https://github.com/ashipunov>

L <sup>A</sup> T <sub>E</sub> X	shipunov, biokey, and xecyr packages, available on CTAN, <a href="http://tug.ctan.org">http://tug.ctan.org</a>
Perl	text converters (Perl), available on <a href="http://ashipunov.info/shipunov/software/misc">http://ashipunov.info/shipunov/software/misc</a>
Shell	DjVu tools img2djvu and djvupages, available on Github
R	smirnov package, available on CRAN, <a href="http://cran.at.r-project.org">http://cran.at.r-project.org</a> ; Homonym Tools, available on Github

## Web Sites developed

- [1] Materials of Alexey Shipunov. <http://ashipunov.info> (content and development)
- [2] Minot State University, Department of Biology. <http://msubiology.info> (primary developer, content and support)
- [3] Foundations of Complex Life. <http://www.complex-life.org> (developed first versions)
- [4] Proceedings of the North Dakota Academy of Sciences. <http://ashipunov.info/journals/pndas> (support)
- [5] Bulletin of Moscow Society of Naturalists. Biological series. <http://ashipunov.info/journals/bmsn> (support)
- [6] Flora of North Dakota project blog. <https://floraofnd.wordpress.com/> (most of content)
- [7] Plant science / Herba forum. <http://molbiol.ru/forums/index.php?&showforum=63> (content and support)

## 9 Membership in Professional Societies

- 1991–present Member of the Moscow Society of Naturalists (MOIP)
- 2015–present Member of the Editorial Council of “Bulletin of the Moscow Society of Naturalists”
- 1995–present Member of the Russian Botanical Society (RBO)
- 2006–present Member of the Botanical Society of America (BSA)
- 2011–present Member of the North Dakota Academy of Science, as a Society historian, support the Web archive of the “Proceedings of the North Dakota Academy of Science”  
(<http://msubiology.info/journals/pndas>)