

CURRICULUM VITAE

IGOR G. LOSKUTOV

PERSONAL DATA

Family name	LOSKUTOV
First name	IGOR
Date of birth	March 17, 1956
Place of birth	St. Petersburg, Russia
Citizenship	Russian Federation
Family	Wife and daughter
Knowledge of foreign language	English

Doctoral degree (year, discipline/scientific field, title of dissertation and supervisor).

- 1985– Ph.D. (Plant Breeding) from the N.I. Vavilov Institute of Plant Industry. Thesis title: *Yield formation and specifics of development of root system in spring soft wheat under the conditions of the Northwest of the non-chernozem region of Russia*. Supervisor – academician, professor V. F. Dorofeev
- 2003– Doctor of Science (D. Sc., Botany and Plant Breeding) from the N.I. Vavilov Institute of Plant Industry. Thesis title: *Specific diversity and breeding potential of genus Avena L.*

Postdoctoral research visits (year and placement).

1991- January - August - Visiting Scientist at Iowa State University, Agronomy Faculty, Ames, Iowa (USA).

Senior lecturer/associate professor experience (year).

2001–Present time – Professor, Faculty of Biology, St. Petersburg State University

Current employment, duration of appointment and the amount of time for research in the position.

- 2001–Present time – Head, Department of Genetic Resources of Oat, Barley, Rye, Coordinator of oat, rye, barley collections, Oat collection Curator, N.I. Vavilov Institute of Plant Genetic Resources.

Previous employment and duration of employment.

- 2001– Leading Researcher, Department of Rye, Barley and Oat, N.I. Vavilov Institute of Plant Genetic Resources;
- 1994–2001 – Senior Researcher, Department of Rye, Barley and Oat, N.I. Vavilov Institute of Plant Genetic Resources;
- 1988–1994 – Researcher, Department of Rye, Barley and Oat, N.I. Vavilov Institute of Plant Genetic Resources;
- 1984–1988 – Junior Researcher, Department of Rye, Barley and Oat, N.I. Vavilov Institute of Plant Genetic Resources;

Awards and special commissions

1993- Grant for Biological Diversity project by George Soros Foundation (USA).

1993- Vavilov-Frankel Fellow (IPGRI, Italy).

2001- Biography profile was published in 19th edition of Who's Who in the World.

Member of the *Avena* Working Group of the European Cooperative Programme for Genetic Resources since 1993;

Member of the International Oat Committee since 1997;

Member of the Russian Botanical Society since 2000;

Scientific curator of the Memorial Study-Museum of N.I.Vavilov at the N.I. Vavilov Institute of Plant Industry (VIR) since 2000;

Chair of AEGIS *Avena* Group since 2004;
Member of the Crop Science Board of Northwest Scientific Centre of the Russian Academy of Agricultural Sciences since 2005;
Member of the Dissertation Scientific Board at the N.I. Vavilov Institute of Plant Industry since 2006;
Member of the Commission for Maintenance and Development of the Scientific Heritage of Academician N.I. Vavilov at the Russian Academy of Sciences since 2007;
Member of GIGA Group of Bioversity International since 2008;
FAO International Consultant on PGR Management since 2012.
Member of the Editorial Board of journals: *Genetic Resources and Crop Evolution* since 2008; *Advances in Plant Sciences Research* since 2013; *Plant Genetic Resources (Ukraine)* since 2014. *Journal of Agricultural Science and Applications (JASA)* since 2014, *Journal of Biology and Earth Sciences* since 2014, *American Journal of Experimental Agriculture* since 2014.

Reviewer of journals: *Russian Journal of Genetics* since 2008, *BMC Evolution Biology* since 2009, *Journal of Agricultural and Biological Sciences* since 2011, *Weed Research* since 2011, *Agricultural Science Research Journal* since 2011, *International Journal of Agriculture and Forestry* since 2012.

Students who have completed their doctoral degree for whom the applicant has been the main supervisor (name and year).

Supervisor of 6 PhD students in Vavilov Institute of Plant Genetic Resources.
PhD Batakova O.B. 2010.
PhD Smirnova L.O. 2010.

Experience of disseminating results to stakeholders/end users.

Head of projects of Russian Foundation of Basic Research and Russian Scientific Foundation:

RFBR-02-04-49667 in 2002-2004 – “Conservation and karyological characteristics of the genetic collection of the *Avena*”.

RFBR-08-04-13668 in 2008-2009 - “Development of technology for selecting initial material for oats breeding of resistance to Fusarium Head Blight and accumulation of mycotoxins”.

RFBR-12-04-01161 in 2012-2014 – “Identification of genes underlying quality traits of barley using QTL mapping in segregating populations and association mapping approach”.

RFBR -13-04-10137к in 2013 г. – Research project of field ecological evaluation of the series of barley mapping populations in the Southern and Central regions of Russia to determine QTLs that affect quality traits in barley.

RFBR -14-04-10179к in 2014 г. - Research project of field ecological evaluation of the series of barley mapping populations in the Southern and Central regions of Russia to determine QTLs that affect quality traits in barley.

RSF - 14-16-00072 in 2014-2016 - Screening of genetic diversity of *Avena L.* genus to Fusarium fungi and selection of perspective resistant genotypes for creating high quality oat cultivars.

Participant of the projects of Russian Foundation of Basic Research:

RFBR-05-04-48406 in 2005-2007 – “Investigation of phylogenetic relationships and evaluation of peculiarities of evolutionary processes in *Avena* species using morphological, botanical, biochemical (storage proteins), and chromosomal (C-banding, in situ hybridization) markers”.

RFBR-08-04-00306 in 2008-2010 – “Analysis of *Avena* species using a complex of morphological-botanical, biochemical (seed storage proteins), molecular (RAPD, cpSSR, sequencing of ITS region of rDNA, NAD1, and TrnLF genes), and chromosomal (C-banding, in situ hybridization) markers”

Project of N.I. Vavilov Institute of Plant Industry (VIR) - University of Minnesota (USA) for “Identifying Fusarium head blight resistance in *Hordeum*” - head from Russian side - 2004-2007

Project of European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR) “A European Genebank Integration System (AEGIS)” for “Selection criteria for identification the Most Appropriate Accessions” – head from Russian side - 2005-2008

Project of All-Russian Institute of Plant Protection - N.I. Vavilov Institute of Plant Industry (VIR) - University of Minnesota (USA) for “Identifying Stem rust (*Puccinia graminis* Pers.) Ug99 resistance in *Hordeum*” - participant - 2009-2010

Project of N.I. Vavilov Institute of Plant Industry (VIR) - The Nordic Genetic Resources Center (NordGen)(Sweden) for “Evaluation, characterization and exchange of crop-genetic resources of Nordic origin” - head from Russian side - 2008-2012

Project of N.I. Vavilov Institute of Plant Industry (VIR) – The Swiss Federal Research Institute Agroscope, Switzerland for “Evaluation of the potential of cultivation of oat and rye accessions in Switzerland and in Russia” - head from Russian side - 2012–2015

Project of N.I. Vavilov Institute of Plant Industry (VIR) – Lund University (Sweden) for “Improving oat oil quality and its resistance to pathogens” – head from Russian side – 2014-2015

During the last five years as Visiting Professor made some lectures in Universities and Research Institutes in Italy (Sardinia), China, Poland, Brazil, Sweden, Estonia.

During the last five years as an Invited Expert visited Bulgaria, Germany, Greece, Italy, China, Poland, Turkey, France, Czechia, Sweden, Brazil, Tajikistan and Estonia.

LECTURING ACTIVITY (ST. PETERSBURG STATE UNIVERSITY)

Crop Science (Bachelor’s full course - 126 h)

Agrobiodiversity (Master’s full course - 63 h)

Plant genetic resources (Master’s full course - 26 h)

Agricultural Biotechnology (Bachelor’s course, partial - 8 h)

Agrochemistry (Bachelor’s course, partial - 10 h)

Lectures on N.I.Vavilov International Workshop for Young Scientists for Plant Genetic Resources in 2011, 2012 and 2013.

Course of lectures on seminar of Global Trust Fund FAO “Creation and conducting of databases of PGR collections” for gene bank specialists from Azerbaijan, Armenia, Kazakhtan, Tadjikistan, Ukraine, Russia (2011).

Course of lectures on seminar of Global Trust Fund FAO “Creation and conducting of databases of PGR collections” for breeders from 10 different regions of Russian Federation (2012).

Course of lectures on workshop of FAO UN “Collection, Conservation and Research of Plant Genetic Resources” at the Tajik National Centre of Plant Genetic Resources, Dushanbe, 2012 for gene bank specialists from Kyrgyzstan and Tajikistan.

Course of lectures on Sub-Regional Training Workshop of FAO UN on Plant Genetic Resources Management Vital Issues of Plant Genetic Resources Collection, Conservation and Research at the Tajik National Centre of Plant Genetic Resources, Dushanbe, 2013 for gene bank representatives from Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan.

SCIENTIFIC INTERESTS

Theoretical, practical and legislative aspects of collecting, evaluation and conserving plant genetic resources

Systematics, evolution, distribution and diversity of cultivated and wild oats

Main characters and properties of cereals, their genetics and breeding.

RECENT ACTIVITIES

Member of seed collecting missions to Turkey in 1985 and 1989, and to Nepal in 1988;

Leader of seed collecting missions to Georgia and Caucasus Regions of Russia in 1987 and 1988;

PGR Expert as a Vavilov-Frankel Fellow, in this capacity visited several genebanks in Italy, Great Britain, the Netherlands, Germany, Hungary, Bulgaria, Poland, Czech Republic and Australia in 1993-1995;

PGR Expert in Russian-multilateral projects from 1999 to present time, in this capacity visited over 25 genebanks in the world;

PUBLICATIONS

Total of 290 scientific publications including 75 papers in English.
h-index 8, citation index -340.

Peer-reviewed books, book chapters and conference reports with international coverage.

Loskutov I.G. 1999. N.I.Vavilov and his Institute. History of the world collection of plant genetic resources in Russia. IPGRI, Rome, 189 p.

Loskutov I.G. 2007. Oat (*Avena L.*). Distribution, taxonomy, evolution and breeding value. St.Pb. VIR. 336 p. (Rus.)

Loskutov I.G. 2009. The history of the world collection of plant genetic resources in Russia. St.Pb. VIR. 290 p. (Rus.)

Loskutov I.G. 2009. Activities VIR associated with plant genetic resources in the 1930s and 1940s. Michitani Co.Ltd., Tokio. 94 p. (Japanese)

Loskutov I.G., Rines H.W. 2011. *AVENA L.* In: Kole C. (ed.) Wild Crop Relatives: Genomic & Breeding Resources. Vol. 1. Cereals. Springer, Heidelberg, Berlin, New York. 2011. p. 109-184.

Peer-reviewed articles in international journals.

Loskutov I.G. 1998. The collection of wild species of CIS as a source of diversity in agricultural traits. Genetic Resources and Crop Evolution, v. 45, 4, 291-295.

Loskutov I.G., Perchuk I.N. 2000. Evaluation of interspecific diversity in *Avena* genus by RAPD analysis. Oat Newsletter, v. 46.

Loskutov I.G. 2001. Influence of vernalization and photoperiod to the vegetation period of wild species of oats (*Avena spp.*). Euphytica, v. 117, No. 2, 125-131.

Loskutov I.G. 2001. Interspecific crosses in *Avena L.* genera. Russian Journal of Genetics, v. 37, No. 5, 467-475.

Loskutov I.G., Kosareva I.A., Semenova E.V. 2001. Features of aluminum resistance in oat wild species. Oat Newsletter, v.47.

Sebesta J., Zwartz B., Roderick H.W., Corazza L., Starzyk M.H., Reitan L., Loskutov I.G. 2001. Incidence of *Pyrenophora avenae* Ito et Kurib. in Europe between 1994-1998, and the varietal reaction of oats to it. Plant Protection Science, v. 37, No. 3, 91-95.

Rodionov A.V., Tyupa N.B., Kim E.C., Machs E.M., Loskutov I.G. 2005. Genomic structure of the autotetraploid oat species *Avena macrostachya* inferred from comparative analysis of the ITS1 and ITS2 sequences: on the oat karyotype evolution during the early stages of the *Avena* species divergence. Russian Journal of Genetics, Vol. 41: 518-528

Shelukhina O.Yu., Badaeva E.D., Loskutov I.G., Pukhalsky V.A. 2007. A Comparative Cytogenetic Study of the Tetraploid Oat Species with the A and C Genomes: *Avena insularis*, *A. magna*, and *A. murphyi*. Russian Journal of Genetics, Vol. 43, No. 6, 613–626.

Loskutov I.G. 2008. On evolutionary pathway of *Avena* species. Genetic Resources and Crop Evolution. v. 55, No. 2, p. 211-220.

Shelukhina O.Yu., Badaeva E.D., Brezhneva T.A., Loskutov I.G., Pukhalsky V.A. 2008. Comparative Analysis of Diploid Species of *Avena L.* Using Cytogenetic and Biochemical Markers: *Avena pilosa* M. B. and *A. clauda* Dur. Russian Journal of Genetics, Vol. 44, No. 9, 1087–1091.

Shelukhina O.Yu., Badaeva E.D., Brezhneva T.A., Loskutov I.G., Pukhalsky V.A. 2008. Comparative Analysis of Diploid Species of *Avena L.* Using Cytogenetic and Biochemical Markers: *Avena canariensis* Baum et Fedak and *A. longiglumis* Dur. Russian Journal of Genetics, Vol. 44, No. 6, 694–701.

Badaeva E.D., Shelukhina O.Yu., Goryunova S.V., Loskutov I.G., Pukhalsky V.A. 2010. Phylogenetic Relationships of Tetraploid AB-Genome *Avena* Species Evaluated by Means of Cytogenetic (C-Banding and FISH) and RAPD Analyses. Journal of Botany. Volume 2010, Article ID 742307, 13 pages doi:10.1155/2010/742307

Badaeva E.D., Shelukhina O.Yu., Diederichsen A., Loskutov I.G., Pukhalsky V.A. 2010. Comparative cytogenetic analysis of *Avena macrostachya* and diploid C-genome *Avena* species. *Genome*, 53, 1-13.

Gavrilova O. P., Gagkaeva T.Yu., Loskutov I.G. 2012. Screening of parent material for breeding oat varieties resistant to *Fusarium* disease and accumulation of mycotoxins in grain. *Russian Agricultural Sciences*, Volume 38, 33-35.

Gagkaeva T.Yu., Gavrilova O. P., Yli-Mattila T., Loskutov I.G. 2013. Sources of resistance to *Fusarium* head blight in VIR oat collection. *Euphytica*, Vol. 191, № 3, 355-364.

Zlotina M. M., Kovaleva O. N., Loskutov I. G., Potokina E. K. 2013. The use of allele-specific markers of the *Ppd* and *Vrn* genes for predicting growing-season duration in barley cultivars. *Russian Journal of Genetics: Applied Research*. Volume 3, Issue 4, pp. 254-264.

PRESENT ADDRESS

44, Bolshaya Morskaya Str., 190000, St. Petersburg, RUSSIA.

N.I. Vavilov Institute of Plant Genetic Resources,

Department of Genetic Resources of Oat, Barley, Rye

Phone: +7 (812) 571 9388

FAX +7 (812) 570 4770

E-mail: i.loskutov@vir.nw.ru