

**RESOLUTION**  
**of the 2<sup>nd</sup> International Conference on Conservation of Forest Genetic Resources in Siberia**  
**(CFGRS-2009)**  
**August 3-9, 2009, Novosibirsk, Russia**

The Russian Federation is the largest forest country in the world, and the forests of Siberia, the Urals, and the Far East compose 75% of its forest resources. Their economic importance greatly depends on the condition, productivity, and genetic potential of their forest tree populations. Under rational management, boreal forests can produce over 50% of the national income, such as in Finland and Sweden. Forest genetic resources (FGR) of Siberia are strategic resources and national treasures of Russian Federation.

The need for the conference on the conservation of FGR in Siberia is exhibited by the increased biospheric role of Siberian taiga in global climate and in the regulation of global biogeochemical cycles; by insufficient knowledge of population genetic structure of the forest-forming species in Northern Asia, especially in taiga; by the absence of regular research of the effects of technogenic pollution, forest exploitation, and global climate change on the forest population genetic structure; by insufficient and narrow target utilization of FGR; as well as by the importance of further synthesis of traditional and the latest molecular genetic approaches for intensification of the process of genetic selection improvement and forest protection.

The purpose of this conference held in Novosibirsk, the unofficial capital of Siberia, was to unite state, federal, academic, and university forest scientists, forest managers, and representatives of federal and regional authorities for developing and implementing of single strategy for the conservation and rational use of FGR of Siberia, the Urals, and the Far East.

The forum was held under the auspices of the International Union of Forest Research Organizations (IUFRO). One hundred one participants took part in it, including 70 scientists from Russia, Bulgaria, Italy, Austria, official representatives of IUFRO and Bioversity International, as well as 31 representatives of state and local authorities, forest management, and forest companies. Seventy-two reports were made on the following subjects: 1) evolutionary genetics of forest ecosystem stability and productivity; 2) genetic structure and dynamics of forest tree populations; 3) strategy of FGR conservation in Siberia under anthropogenic effects and global climate change; 4) tree improvement programs and conservation management, genetic inventory, selection of valuable genotypes, seed zoning, genetics of resistance and productivity.

The conference participants have stated that certain work on the study and conservation of Siberian FGR has been carried out by the efforts of Russian and foreign scientists. In past years, success has been achieved in the study of the population structure and natural hybridization of forest tree species. Modern approaches, principles, and research methods (including ecological-genetic, phenetic, allozyme, and DNA analyses) have been developed. Information on geographic variability and inheritability of adaptive and economically valuable traits of pine, larch, cedar, spruce, poplar, and other species has been summarized. The prospects of using ecological-genetic, molecular, and biotechnological methods in solving the problems of conservation and rational use of the genepools of forest tree species of the boreal zone have been

evaluated. New approaches to the conservation of gene resources during forest restoration have been developed. Monographs creating a scientific basis for developing measures on the conservation of FGR of the Urals and Siberia have been published.

Following the results of the first conference held in Barnaul in 2007, the participants of the Novosibirsk forum have noted that 14 proposals addressing the Russian Federation Government and aimed at increasing the efficiency of the conservation and utilization of FGR of Siberia have been made and four actions have been planned in the resolution of the first conference. By the time of the second conference only two of them had been accomplished to some extent: 1) organization of regular conferences on the study and conservation of FGR in the forthcoming years in Novosibirsk, Krasnoyarsk and other Siberian cities; 2) creation of a united state data bank of the forest tree genetic breeding programs in Russia. It can also be stated that one of the main purposes of the organizers of the present series of conferences – creation of an informal association of forest geneticists, breeders, seed producers, and forest managers concerned about the problems of the conservation, study, and rational use of FGR of Siberia - has been achieved.

However, many proposals of the resolution of the first conference have not been fulfilled. Moreover, a number of negative factors impeding the solution of the problem of the conservation of FGR of Siberia and fulfillment of the resolutions of international agreements in the field of biodiversity and genetic resources still remain. Those are the following:

1. The lack of well-defined measures of conservation of FGR in the current system of forest management and production in the Russian Federation.
2. The ending of coordination of scientific research in genetics, selection, seed-growing, and tree introduction.
3. The destruction (deforestation, fires, etc.) of many valuable forest sites that secured the conservation of FGR of Russia.
4. Considerable reduction, and in some regions full stoppage, of work on creation, study, and protection of the forest tree genetic breeding programs.
5. The liquidation of the network of specialized selection and seed-growing organizations and the institute of scientific curatorship of the forest tree genetic breeding programs.
6. A sharp decrease in the number of thematic conferences and training workshops.
7. The ignoring of the resolutions of the international scientific conference on forest genetics, selection, and biotechnology in forest management (Pushkino, 2008) and the first international conference on the conservation of FGR of Siberia (Barnaul, 2007) by the federal executive authorities.
8. A long-standing lack of attention by the Federal Forestry Agency to the vital conceptual documents on the conservation and rational use of FGR worked out by the Governmental Unitary Research Enterprise "Research Institute of Forest Genetics and Selection": "The

concept of a long-term program of genetic improvement of the forests of Russia”,  
“Conservation of forest genetic resources of Russia”, and others.

To eliminate the above-mentioned negative factors, the participants of the conference consider it necessary to appeal to the President of the Russian Federation, the State Duma, the Federation Council, the Ministry of Agriculture, the Federal Forestry Agency, the Russian Security Council, the Public Chamber, the Scientific Council on Forest Problems of the Russian Academy of Sciences, the Ministry of Natural Resources of the Russian Federation, the Russian Society of Foresters, and the All-Russian Society of Geneticists and Breeders with a proposal to develop a state system of measures on the conservation of FGR that determine the ecological and economic security of the state, including:

- 1) introducing amendments to the Forest Code of the Russian Federation concerning the responsibilities of the participants of forest-related activities for the conservation and rational use of FGR;
- 2) asking the President and the Government of Russia to provide budget financing for scientific research on FGR and work on the creation and maintenance of forest tree genetic breeding programs;
- 3) securing the fulfillment of Russia’s international obligations on the conservation of FGR (Convention on Biodiversity, Montreal Process, Ministerial agreements on the European Forests, etc.);
- 4) creating a genetic bank of seeds, pollen and meristems of the main forest tree species in Akademgorodok near Krasnoyarsk;
- 5) reforming the only scientific research institute that executes and coordinates scientific research on the conservation and rational use of FGR – Governmental Unitary Research Enterprise “Research Institute of Forest Genetics and Selection” - into the Federal State Institution “Scientific Research Institute of Forest Genetics and Selection”;
- 6) developing a national program of conservation and rational use of FGR of Russia that would take into account the international experience in forest genetics, selection, and seed production;
- 7) assigning forest genetic reserves, plus stands, geographic cultures and also other forest tree genetic breeding programs a status that would ensure their protection and purpose;
- 8) developing methods of harvesting that would ensure the conservation of an optimal level of genetic variation and integrity of spatial population structure of the main forest tree species.

The conference participants also consider it necessary to recommend that biological journals would include “Forest Genetic Resources” in their topics and rubrics.

The implementation of the above-mentioned measures will create a solid basis for conservation and rational use of FGR for the good of Siberia, Russia, and all mankind.

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Program Committee  
Organizational Committee  
Conference participants  
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