



Azerbaijan National Academy of Sciences  
Institute of Botany

# INTERNATIONAL CONFERENCE



## ENVIRONMENTAL CHANGES CONSERVATION OF PLANT DIVERSITY

conference program  
and  
abstract book

21-23 April 2013  
Baku, Azerbaijan



The conference was financially and organizationally supported by the Science Development Foundation under the President of the Republic of Azerbaijan and held within the grant project № EIF-2012-2(6)-39/32/3

Konfrans Azərbaycan Respublikasının Prezidenti yanında Elmin İnkişafı Fondunun maliyyə-təşkilatı dəstəyi ilə EIF-2012-2(6)-39/32/3 nömrəli qrant layihəsi çərçivəsində keçirilmişdir:



EIF-2012-2(6)-39/32/3

**Program and abstract book of the international conference "Environmental changes and conservation of plant diversity", Baku, 21-23 April 2013. Baku: Science Development Foundation under the President of the Republic of Azerbaijan, ISBN 978-9952-8180-4-8, 2013. - 78 pages.**

**"Ətraf mühit dəyişməsi və bitki müxtəlifliyinin qorunması" beynəlxalq konfransının proqram və abstrakt kitabı, Bakı, 21-23 aprel 2013-cü il. Bakı: Azərbaycan Respublikasının Prezidenti yanında Elmin İnkişafı Fondu, ISBN 978-9952-8180-4-8, 2013. - 78 səhifə.**

**ISBN 978-9952-8180-4-8**



9 789952 818048

© Science Development Foundation  
under the President of the Republic of Azerbaijan

© Azərbaycan Respublikasının Prezidenti yanında  
Elmin İnkişafı Fondu

Bu layihə 2012-ci ildə Azərbaycan Respublikasının Prezidenti yanında Elmin İnkişafı Fondu tərəfindən Azərbaycan Respublikası Müəllif Hüquqları Agentliyində qeydiyyatdan keçirilmiş və qeydiyyat haqqında 7287 nömrəli şəhadətnamə verilmişdir.

This project was registered by the Science Development Foundation under the President of the Republic of Azerbaijan in the Copyright Agency of the Republic of Azerbaijan in 2012 and registration certificate № 7287 was provided accordingly.

# PROGRAM

**Saturday, April 20** – Arrival

**Sunday, April 21**

10.00-11.00 – *Registration*

11.00-12.00 – *Opening Ceremony*

**Academician Ahliman Amiraslanov** – Honorable chairman

**Prof. Novruz Guliyev** - Vice-Minister of Ministry of Ecology and Natural Resources

**Mr. Azer Aliyev** - Chief of Ecological Department of SOCAR

**Prof. Valida Ali-zade** – Director of the Institute of Botany, ANAS

*Status of plant diversity conservation in Azerbaijan*

12.00-12.30 – *Break*

12.30-13.05 – **Prof. Steven McCutcheon** – University of Georgia, USA

*Genetic and Proteomic Diversity of Plants Used in Phytoremediation*

13.05-13.40 – **Prof. Munir Ozturk** – Ege University, Turkey

*Biodiversity, Conservation and Climate Change*

**(Chairs** – Prof. A.Baker and Prof. W.Horst)

13.40-14.40 – *Lunch*

14.40-15.15 – **Prof. Volker Römheld** – University of Hohenheim, Germany

*Rhizosphere processes as determinants for heavy metal uptake in plants*

15.15-15.50 – **Prof. Nicolaus von Wiren** – IPK, Germany

*Root morphological changes under variable nutrient availabilities*

**(Chairs** – Prof. E.Grill and Prof. N.Dickinson)

15.50-16.05 – *Break*

16.05-16.40 – **Prof. Suzanne Sharrock** – BGCI, UK

*The Global Strategy for Plant Conservation – a framework for conservation action from local to global*

16.40-17.15– **Prof. Gregor Kozlowski** – University of Fribourg, Switzerland

*Conservation of Tertiary relict trees with specific reference to the genus Zelkova (Ulmaceae)*

**(Chairs** – Prof. T.Borsch and Dr. P.Smith)

17.20 – *City tour*

19.00 – *Banquet in the city center*

**Monday, April 22**

09.00-09.35 – **Prof. Alan Baker** – Honorary Professorial Fellow, UK

*Metallophytes: a biodiversity and phytotechnological resource for soil clean-up, phytomining and mine waste restoration*

09.35-10.10 – **Prof. Walter Horst** – University of Hannover, Germany

*Aluminium exclusion and Al accumulation are not alternative Al resistance mechanisms – the example of buckwheat*

10.10-10.35 – **Dr. Tiina Nieminen** – Metla, Finland

*Response of birch (*Betula pubescens*) and pine (*Pinus sylvestris*) seedlings to elevated soil heavy metal concentrations*

10.35-11.00 – **Dr. Philip Rogers** – AMEC, UK

*Flora, biodiversity and conservation – implications for the global mining industry*

(**Chairs** – Prof. V.Römheld and Prof. S.McCutcheon)

11.00-11.15 – *Break*

11.15-11.50 – **Prof. Erwin Grill** – Technical University of Munich, Germany

*Drought in times of climate change: a major threat for plants and agriculture*

11.50-12.25 – **Prof. Muhammad Iqbal** – Jamia Hamdard University, India

*Active ingredients of medicinal plants in changing environment*

12.25-12.50 – **Dr. Liisa Ukonmaanaho** – Metla, Finland

*Recovery of understorey vegetation after forest clear-cut on peatland*

12.50-13.10 – **Nargiz Sultanova** – Institute of Botany, Azerbaijan

*Occurrence and detection of some single stranded DNA (ss DNA) plant viruses in Azerbaijan*

(**Chairs** – Prof. M.Ozturk and Prof. N.von Wieren)

13.10-14.10 – *Lunch*

14.10-14.45 – **Prof. Thomas Borsch** – Botanic Garden and Botanical Museum Berlin, Germany

*Scientific research to support conservation in the Caucasus – the Caucasus plant Diversity Initiative*

14.45-15.20 – **Prof. Sajevo Maurizio** – European Regional Representative, CITES Plants Committee, University Palermo, Italy

*The Convention on International Trade in Endangered Species (CITES) and the Conservation of Plant Diversity*

15.20-15.55 – **Dr. Paul Smith** – Royal Botanical Gardens, Kew, UK

*The Millennium Seed Bank Partnership: conserving and enabling the use of plant diversity for innovation and adaptation*

15.55-16.20 – **Dr. Clare Tiverdi** – Royal Botanical Gardens, Kew, UK

*Millennium Seed Bank Partnership: Saving the Flora of the Caucasus*

(**Chairs** – Prof. V.Ali-zade and Dr. S.Scharrock)

16.20-16.35 – *Break*

16.35-17.10 – **Prof. Nicolaus Dickinson** – Lincoln University, New Zealand

*Benefits, trade-offs and conservation of plant diversity in novel ecosystems and changed environments in New Zealand*

17.10-17.35 – **Prof. Ahmad Aksoy** – Erciyes University, Turkey

*Conservation of plant diversity: A Case study from Kayseri - Turkey*

17.35-18.00 – **Prof. Faridah Hanum Ibrahim** – University Putra, Malaysia

*Plant Diversity of Ayar Hitam Forest Reserve-Malaysia*

18.00-18.20 – **Prof. Svetlana Litvinskaya** – Kuban State University, Russia

*Rare genofound and peculiarities of biodiversity of Northern Caucasus under changing environment Diversity*

**(Chairs** – Prof. M.Sajeva and Dr. G.Parolly)

18.20-18.50 – *Poster session*

19.00 – *Dinner*

## **Tuesday, April 23**

09.30-10.05 – **Prof. Gunter Neumann** – University of Hohenheim, Germany

*Glyphosate and the challenge of an ecological risk assessment*

10.05-10.40 – **Prof. M.N.V. Prasad** – University of Hyderabad, India

*Water security for sustainable development - search for natural products for the treatment of waste water*

10.40-11.05 – **Prof. Giorgi Kvesitadze** – Georgian Academy of Sciences, Georgia

*Symbiotic action of plants and microorganisms as detoxifiers of organic pollutants*

11.05-11.25 – **Dr. Esmira Alirzayeva** – Institute of Botany, Azerbaijan

*Multiple tolerances to environmental stress factors in Artemisia plants*

**(Chairs** – Prof. M.Iqbal and Dr. L.Ukonmaanaho)

11.25-11.40 – *Break*

11.40-12.15 – **Dr. Deirdre Ryan** - JSTOR, USA

*Global Plants Initiative: Collaborative community built database*

12.15-12.40 – **Dr. Gerald Parolly** – Botanic Garden and Botanical Museum Berlin, Germany

*The conservation of Calligonum bakuense – A workshop report*

12.40-13.05 – **Dr. Gabor Sramko** – University of Debrecen, Hungary

*Conservation phylogenetics – setting priority based on lineage uniqueness*

13.05-13.25 – **Dr. Eldar Shukurov** - Institute of Botany, Azerbaijan

*Phytorestitution of disturbed desert habitats in Qobustan Region of Azerbaijan*

**(Chairs** – Dr. C.Trivedi and Prof. Faridah Hanum)

13.25-14.25 – *Lunch*

14.25-15.00 – *Round table*

15.00-15.30 – *Discussion and preparation of action plan*

15.30-15.45 – *Break*

15.50 – *Excursion*

19.00 – *Dinner and Closing ceremony*

## **Wednesday, April 24** - Departure

## **The Convention on International Trade in Endangered Species (CITES) and the Conservation of Plant Diversity**

***Maurizio SAJEVA and Valentina VAGLICA***

Dipartimento di Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche, University of Palermo, Via Archirafi 18, Palermo I-90123, Italy, [maurizio.sajeva@unipa.it](mailto:maurizio.sajeva@unipa.it)

Habitat destruction is the main cause of the decline in biodiversity, but trade of wild plants and animals is certainly the second cause. The idea of regulating trade in wildlife arose in the 1960's with a draft resolution approved by the IUCN in 1963.

The text of CITES was approved by some 80 countries in 1973, and today 179 countries are part of it. CITES is under the umbrella of the United Nations through the United Nations Environment Programme. CITES aims to control and regulate trade of species whose trade is, or can be in the near future, a threat to their survival in habitat. CITES is based on three Appendices (see <http://www.cites.org>) which regulate species depending on their level of threat. Despite the fact that the attention of the public and the media is more prominent for animal species, the number of threatened plants is higher. More than 25,000 taxa of plants are included in the CITES Appendices while listed animals are about 5000. Besides monitoring trade in endangered taxa CITES can contribute to limit the trade of Invasive Alien Species (IAS), which are a major threat to the conservation of biodiversity. The change of using CITES to control trade in IAS has been overlooked but some member states and the European Union are now issuing appropriate legislations linked to CITES in order to fight this further threat to biodiversity. CITES, CBD and the Global Strategy for Plant Conservation play a strong synergic role in conservation of plant diversity.