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[Google Scholar](#) – Ivaylo N. Tsvetkov

ORHID: 0000-0001-9957-7050

**Date and place of birth:** 17 December 1956, Vratsa

**Research interests:** Plant biotechnologies (*in vitro* techniques, *ex situ* conservation of forest genetic resources, cryopreservation), forest genetics, physiology, forest plantations

**Education:**

1992 r. : PhD, Forest Research Institute/ Institute of Genetic Engineering – Kostinbrod,

Dissertation “Micropropagation of common oak (*Q. robur* L.)”

1982 r. : M.Sc., Forestry, University of Forestry– Sofia

**Training:**

1993: Forest Research Station Punkaharju, Finland, Supervisor Dr. Hely Haggman, Application of plant biotechnologies in forestry and techniques for gene transfer (two weeks);

1998-2000, 2002-2003: GRP “Gabriel Lippmann”, Luxembourg, Luxembourg, Supervisor Dr. J-F. Hausman, Modern plant biotechnologies for *ex situ* preservation of valuable forest genetic resources (11 months in total);

2005: Institute for genetic engineering – Kostinbrod, – ICGEB course “Gene transfer for plant breeding improvement” (one week);

2005: State Research Institute, Geisenheim, Germany, Supervisor Prof. M. B. Schröder, European Training Seminar on Plant Flow Cytometry (one week);

2007: IVALSA–CNR, Florence, Italy, Supervisor Dr. M. Lambardi, Application of cryotechniques for long-term storage of germplasm of woody species (6 weeks);

2017: University of Antwerp, PLECO, Antwerp, Belgium, Supervisor Prof. R. Ceulemans, Methodological tools for ecology research applicable in poplar SRC (two weeks);

2018-2019: Palencia, University of Valladolid, Spain, Supervisor J. M. Garcia, Testing susceptibility of Bulgarian provenances of Scotch pine (*P. sylvestris* L.) and Austrian pine (*P. nigra* Arn.) to *Fusarium circinatum* – studying some physiological aspects of the host-parasite interaction (two months).

**Employment:**

2008 up to now: Associate Professor (Senior Researcher), Forest Research Institute – Bulgarian Academy of Sciences

1994-2008: Research fellow (III to I degree), Forest Research Institute – Bulgarian Academy of Sciences

1982-1986: Hunting and fishery expert, Local Unit of hunting and fishery, Vratsa

**Administrative responsibilities:**

Member of the Scientific council, Forest Research Institute

Member of the Editorial board, journal “Propagation of Ornamental Plants”

Member of the Editorial board, journal “Forest Science”

**Participation in boards and commissions of experts:**

2018: Member of the Temporary Scientific commission of experts, division “Agricultural sciences”, Bulgarian National Science fund;

2017 and 2019: Commission of expert for assessment of project proposals, Lithuanian Research Council, division "Agricultural sciences"

### Teaching activity

Part-time assistant, University of Forestry – Sofia, "Forest genetics and breeding", 1996–97 and 1997-98.

### Selected publications:

- Keca L, Marceta M, Bozic G, Peric S, **Tsvetkov I**, Andreassen J, Stijovic A, Mandjukovski D, Zlokapa B., Niculescu V N (2019) Non-native tree species: Strategies for sustainable management in Europe, *International Forestry Review*, 21(3): 295-311.
- Fady B, Aravanopoulos F A, Alizoti P, Mátyás C, Von Wühlisch G, Westergren M, Belletti P, Cvjetkovic B, Ducci F, Huber G, Kelleher C T, Khaldi A, Bou Dagher Kharrat M, Kraigher H, Kramer K, Mühlethaler U, Peric S, Perry A, Rousi M, Sbay H, Stojnic S, Tijardovic M, **Tsvetkov I**, Varela M C, Vendramin G G, Zlatanov T (2016) Evolution-based approach needed for the conservation and silviculture of peripheral forest tree populations, *Forest Ecology and Management*, 375: 66-75.
- Stankova T, Gyuleva V, **Tsvetkov I**, Popov E, Velinova K, Velizarova E, Dimitrov D N, Hristova H, Kalmukov K, Dimitrova Pr, Glushkova M, Andonova K, Georgiev G, P, Kalaydzhiev I, Tsakov Hr (2016) Aboveground dendromass allometry of hybrid black poplars for energy crops, *Ann For. Res.* 59(1): 61-74.
- Kazana V, Tsourgiannis L, Iakovoglou V, Stamatiou C, Alexandrov A, Araújo S, Bogdan S, Bozic G, Brus R, Bossinger G, Boutsimea A, Celepirović N, Cvrčková H, Fladung M, Ivankovic M, Kazaklis A, Koutsona P, Luthar Z, Máchová P, Malá J, Mara K, Mataruga M, Moravcikova J, Paffetti D, Paiva JA, Raptis D, Sanchez C, Sharry S, Salaj T, Šijačić-Nikolić M, Tel-Zur N, **Tsvetkov I**, Vettori C, Vidal N (2015) Public attitudes towards the use of transgenic forest trees: a cross-country pilot survey, *iForest*, doi: 10.3832/ifor1441-008, November, e1-e10.
- Tsvetkov I**, Benelli C, Capuana M, De Carlo A, Lambardi M (2009) Application of vitrification-derived cryotechniques for long-term storage of poplar and aspen (*Populus* spp.) germplasm, *Agricultural and Food Science*, 16: 160-164.
- Tsvetkov I**, Jouve L, Hoffmann L, Hausman J-F (2007). Effect of using different approaches for *in vitro* rooting of *Sorbus domestica* L. *Belgian J. of Botany* 140 (2): 151-156.
- Tsvetkov I**, Jouve L, Hoffmann L, Hausman J-F (2007) The medium composition differentially affects regrowth characteristics in *in vitro*-derived encapsulated shoot tips of *P. euphratica* Oliv. *Propagation of Ornamental Plants*, 7(4): 180-183.
- Tsvetkov I**, Jouve L, Hausman J-F (2006) Effect of alginate matrix composition on regrowth of *in vitro*-derived encapsulated apical microcuttings of hybrid aspen, *Biologia Plantarum*, 50 (4): 722-724.
- Tsvetkov I**, Hausman J-F (2005) *In vitro* regeneration from alginate-encapsulated microcuttings of *Quercus* sp., *Scientia Horticulture*, Kluwer Publ., 103: 503-507.
- Heuertz M, Hausman J-F, **Tsvetkov I**, Frascaria-Lacoste N, Vekemans X (2001) Assessment of genetic structure within and among Bulgarian populations of the common ash (*Fraxinus excelsior* L.), *Molecular Ecology*, 10: 1615-1623.

### Research projects:

- Project 760/88 "Genetic and cytogenetic studies on forest species and shrubs by using cell and tissue cultures", 1988-1990, Bulgarian National Science fund, project team member.
- Project 89/91 "Conservation of genetic resources of difficult to propagate forest species by alternative biotechnologies", 1991-1993, Bulgarian National Science fund, project team member.
- Project 231/92 "Biochemical and anatomical studies in the course of controlled *in vitro* organogenesis in some forest species", 1992-1994, Bulgarian National Science fund, project team member.

- Bilateral project, Forest Research –Sofia/ Institute of Plant Genetics – Nitra “Micropropagation of forest species and bioanatomical studies on the reproductive process by biochemical methods”, 1994-1996, Bulgarian Academy of Sciences, project team member.
- Project 307/93 “Use of contemporary biotechnological methods for preservation of valuable genetic resources – development of embryogenic systems for *in vitro* regeneration in some forest species, 1993-1996, Bulgarian National Science fund, project leader.
- Project 646/96 “Application of modern agrotechnologies in forestry - elaboration of embryogenic systems for *in vitro* regeneration in some important forest species, 1996-1998, Bulgarian National Science fund, project leader.
- Project 703/97 “Use and preservation of forest genetic resources of economically important species by contemporary biotechnological methods for breeding purposes, 1997-1999, Bulgarian National Science fund, project team member.
- GEF Biodiversity project “, Rila National Park“, 1997 - project team member.
- Project “Preservation of genetic resources of noble broadleaved forest species in Southeastern Europe”, 1998-2002, coordinated by IPGRI–Rome, project team member.
- Project “Molecular ecophysiology as a tool for the selection of highly stress resistant poplar species for multipurpose forests“; 2001-2004, 5<sup>th</sup> European Framework, project team member, subcontractor.
- Project “Establishment of provenance trials of fast-growing clones of paulownia (*Paulownia* spp.), 2009-2011, Executive Forest Agency, project team member.
- Project “Establishment of experimental plantations from prospective poplar clones for assessment of their potential for biomass production, 2013-2015, Executive Forest Agency, project leader.
- Project “Complex assessment of the potential of forest and agrarian species for establishment of energy plantations in Bulgaria, 2013-2015, Bulgarian National Science fund, project team member, work package leader.
- Project „Assessment of bioproductivity of fast-growing broadleaved species“, 2016-2020, Bulgarian National Science fund, project team member, work package leader.
- COST action 843 “Quality enhancement of plant production through tissue culture” – Management Committee member.
- COST action FP801 “Established and emerged *Phytophthora*: Increasing treats to woodland and forest ecosystems in Europe” – Working group member.
- COST action FP871 “Cryopreservation of crop species in Europe” – Management Committee member
- COST action FP905 “Biosafety of forest transgenic trees: Improving the scientific basis for safe tree development and implementation of EU policy directives” – Management Committee member.
- COST action FP1103 “*Fraxinus* dieback in Europe: elaborating strategies and guidelines for sustainable management – Management Committee member.
- COST action FP1202 “Strengthening conservation: a key issue for adaptation of marginal/peripheral populations of forest tree to climate change in Europe – Management Committee member.
- COST action FP1301 “Innovative management and multifunctional utilization of traditional coppice forests – an answer to future ecological, social and social challenges in the European forestry sector – Management Committee deputy member.
- COST action FA1306 „The quest for tolerant varieties: Phenotyping at plant and cellular level – Management Committee member.
- COST action FP1403 “Non-native tree species in European forests – experiences, risks and opportunities – Management Committee member.
- COST action FP1406 “Pine pitch canker – strategies for management of *Gibberella circinata* in greenhouses and forests (PINESTRENGTH) – Management Committee member.
- COST action CA16219 „Harmonization of UAS techniques for agricultural and natural ecosystems monitoring” - Management Committee member.

- COST action CA18134 “Genomic Biodiversity Knowledge for Resilient Ecosystems”- Management Committee member.
- COST action CA18201 “An integrated approach to conservation of threatened plants for the 21<sup>st</sup> century” - Management Committee member.