

INFORMAȚII PERSONALE

**Ioan DUTCA**

📍 1, Sirul Beethoven, Brasov, 500123, Romania  
 ☎ 0040 268 413 000  
 ✉ [iduntca@unitbv.ro](mailto:iduntca@unitbv.ro)  
 🌐 <https://www.unitbv.ro/contact/comunitatea-unitbv/2170-dutca-ioan.html>

Sexul M | Data nașterii 10/11/1980 | Naționalitatea RO

EXPERIENȚA PROFESIONALĂ  
SI DIDACTICĂ

2012 – prezent **Sef lucrari**  
Universitatea Transilvania din Brasov

2015-prezent **Cercetător**  
Buckinghamshire New University, UK

EDUCAȚIE ȘI FORMARE

Octombrie 2007 – Mai 2011 **Doctor**  
Universitatea Transilvania din Brasov, Brasov, Romania

Octombrie 2005 – Iunie 2007 **Masterat**  
Universitatea Transilvania din Brasov, Brasov, Romania

Octombrie 2000 – Iunie 2005 **Licenta**  
Universitatea Transilvania din Brasov, Brasov, Romania

COMPETENTE PERSONALE


Limba(i) maternă(e) Romana

Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Engleza	Nivel avansat	Nivel avansat	Nivel avansat	Nivel avansat	Nivel avansat

Permis de conducere B

INFORMATII SUPLIMENTARE



- Publicații
- Dutca, I. (2022) Modelare în Silvicultură. Suport de curs. Editura Universității Transilvania din Brașov. pp. 221.
- Dutcă, I., McRoberts, R. E., Næsset, E., & Blujdea, V. N. (2022). Accommodating heteroscedasticity in allometric biomass models. *Forest Ecology and Management*, 505, 119865.
- Stăncioiu, P. T., Șerbescu, A. A., & Dutcă, I. (2021). Live Crown Ratio as an Indicator for Tree Vigor and Stability of Turkey Oak (*Quercus cerris* L.): A Case Study. *Forests*, 12(12), 1763.
- Blujdea, V. N., Sikkema, R., Dutcă, I., & Nabuurs, G. J. (2021). Two large-scale forest scenario modelling approaches for reporting CO<sub>2</sub> removal: a comparison for the Romanian forests. *Carbon Balance and Management*, 16(1), 1-17.
- Osewe, E. O., & Dutcă, I. (2021). The Effects of Combining the Variables in Allometric Biomass Models on Biomass Estimates over Large Forest Areas: A European Beech Case Study. *Forests*, 12(10), 1428.
- Blujdea, V. N., Viskari, T., Kulmala, L., Gârbacea, G., Dutcă, I., Miclăuș, M., ... & Liski, J. (2021). Silvicultural Interventions Drive the Changes in Soil Organic Carbon in Romanian Forests According to Two Model Simulations. *Forests*, 12(6), 795.
- Blennow, K., Persson, J., Gonçalves, L. M. S., Borys, A., Dutcă, I., Hynynen, J., ... & Reyer, C. P. (2020). The role of beliefs, expectations and values in decision-making favoring climate change adaptation—implications for communications with European forest professionals. *Environmental Research Letters*, 15(11), 114061.
- Dutcă, I., Mather, R., & Ioraș, F. (2020). Sampling trees to develop allometric biomass models: How does tree selection affect model prediction accuracy and precision?. *Ecological Indicators*, 117, 106553.
- Dutcă, I., Zianis, D., Petrișan, I. C., Bragă, C. I., Ștefan, G., Yuste, J. C., & Petrișan, A. M. (2020). Allometric Biomass Models for European Beech and Silver Fir: Testing Approaches to Minimize the Demand for Site-Specific Biomass Observations. *Forests*, 11(11), 1136.
- Persson, J., Blennow, K., Gonçalves, L., Borys, A., Dutcă, I., Hynynen, J., ... & Merganičová, K. (2020). No polarization—Expected Values of Climate Change Impacts among European Forest Professionals and Scientists. *Sustainability*, 12(7), 2659.
- Dutcă, I. (2019). The Variation Driven by Differences between Species and between Sites in Allometric Biomass Models. *Forests*, 10(11), 976.
- Dutcă, I., McRoberts, R. E., Næsset, E., & Blujdea, V. N. (2019). A practical measure for determining if diameter (D) and height (H) should be combined into D<sup>2</sup>H in allometric biomass models. *Forestry: An International Journal of Forest Research*, 92(5), 627-634.
- Stăncioiu, P. T., Dutcă, I., Bălăcescu, M. C., & Ungurean, Ș. V. (2019). Coexistence with Bears in Romania: A Local Community Perspective. *Sustainability*, 11(24), 7167.
- Turtoi A.V., Stăncioiu, P. T., Dutcă, I. (2019). The live crown ratio-an indicator for growth vigor of European beech trees (*Fagus sylvatica* L.). *Revista Padurilor*, 134(4), 29-40.
- Dutcă, I., Mather, R., Blujdea, V.N., Ioraș, F., Olari, M. and Abrudan, I.V., 2018. Site-effects on biomass allometric models for early growth plantations of Norway spruce (*Picea abies* (L.) Karst.). *Biomass and Bioenergy*, 116, pp.8-17.
- Dutcă, I., Stăncioiu, P.T., Abrudan, I.V., Ioraș, F., (2018). Using clustered data to develop biomass allometric models: the consequences of ignoring the clustered data structure, *Plos One*.
- Dutcă, I. (2018). Biomass data for young, planted Norway spruce (*Picea abies* (L.) Karst.) trees in Eastern Carpathians of Romania. *Data in brief*, 19, 2384-2392.
- Dutca, I., Mather, R., Ioras, F. (2018) Tree biomass allometry during the early growth of Norway spruce (*Picea abies*) varies between pure stands and mixtures with European beech (*Fagus sylvatica*). *Canadian Journal of Forest Research*, 48(1), 77-84.
- Palaghianu, C., Dutca, I. (2017) Afforestation and reforestation in Romania: History, current practice and future perspectives. *Reforesta*, 4, 54-68
- Dutca, I., Negrutiu, F., Ioras, F., Maher, K., Blujdea, V.N., Ciuvat, L.A. (2014). The Influence of Age, Location and Soil Conditions on the Allometry of Young Norway Spruce (*Picea abies* L. Karst.) Trees. *Notulae Botanicae Horti Agrobotanici*, 42(2), 579-582.  
<http://www.notulaeobotanicae.ro/index.php/nbha/article/viewFile/9714/7771>
- Ciuvat, A.L., Abrudan, I.V., Blujdea, V., Dutca, I., Nuta, I. S., Elena, E.D.U. (2013). Biomass Equations and Carbon Content of Young Black Locust (*Robinia pseudoacacia* L.) Trees from Plantations and Coppices on Sandy Soils in South-Western Romanian Plain. *Notulae Botanicae Horti Agrobotanici*, 41(2), 590-592.
- Blujdea, V., Pilli, R., Dutcă, I., Ciuvăț, L., Abrudan, I.V. (2012) Allometric biomass equations for young broadleaves in plantations in Romania. *Forest Ecology and Management*, 264, p172–184.
- Dutcă, I. (2011) Estimarea stocării carbonului în plantațiile tinere de molid instalate pe terenuri neforestiere din Carpații Orientali. Editura Universitatii Transilvania din Brasov, pp 121.
- Dutcă, I., Abrudan, I.V., Stăncioiu, P.T., Blujdea, V. (2010) Biomass Conversion and Expansion Factors for Young Norway Spruce (*Picea abies* (L.) Karst.) Trees Planted on Non-Forest Lands in Eastern Carpathians. *Notulae Botanicae Horti Agrobotanici*, 38(3), p286 - 292.

- Stăncioiu, P.T., Abrudan, I.V., Dutcă, I. (2010) The Natura 2000 ecological network and forests in Romania: implications on management and administration, *International Forestry Review*, Vol.12(1), p106-113.
- Dutcă, I., Abrudan, I.V. (2010) Estimation of Forest Land Cover Change in Romania between 1990 and 2006, *Bulletin of Transilvania University of Brasov, Series II Forestry, Wood Industry and Agricultural Food Engineering*, Vol. 2 (51), p13-18.
- Dutcă, I., Drăghici, C., Abrudan, I.V., (2009) Comparație între două metode expeditiv de estimare a biomasei uscate a acelor și lemnului din ramurile de molid (*Picea abies* L. Karst.) [Two different methods to estimate needles and branches biomass for Norway spruce (*Picea abies* L. Karst)]. In *Proceedings of Forest and Sustainable Development*.
- Dutcă, I., Abrudan, I.V., Blujdea, V. (2009) The Impact of Afforestation on Carbon Storage - A Review. *Bulletin of Transilvania University of Brasov, Series II Forestry, Wood Industry and Agricultural Food Engineering*
- Prezentări
- Range of covariate in regression analysis. In: *Robust projections of forests under climate change - data, methods and models*, Potsdam, Germany, October 2017
- How effective is age as independent variable in predicting biomass of young trees? In: *Modern horticulture: Achievements and Perspectives* Chisianu, Republic of Moldova, October, 2015
- Allometric differences in young Norway spruce trees from pure and mixed stands In: *Ecology, silviculture and management of spruce species in mixed forests (IUFRO conference)* University of Alberta, Edmonton, Alberta Canada, August 2015
- The influence of age, location and soil conditions on tree allometry. In: *International Symposium "Forest and Sustainable Development"*, Brasov, Romania, October 2014
- Carbon sequestration in forest ecosystems in the context of climate change. In: *International summer school "Climate Change and Restoration of Degraded Lands"*, El Hierro, Spain, July 2014
- The potential of site specific factors in explaining variance in allometric equations. In: *International conference "Climate Change and Restoration of Degraded Lands"*, El Hierro, Spain, July 2014
- Two different methods to estimate needles and branches biomass for Norway spruce. In: *International Symposium "Forest and Sustainable Development"*, Brasov, Romania, October 2008

- Proiecte
- Holistic management practices, modelling and monitoring for European forest soils (HOLISOILS);  
Funded by European Commission, Horizon 2020; Period 2021-2025
  - Improving the accuracy and precision of biomass estimations for *Fagus sylvatica* L., from tree level to large area, using terrestrial laser scanning technology – BIOPREDICT; Funded by UEFISCDI; Period: 2020-2022
  - Mobilizing and Monitoring Climate Positive Efforts in Forests and Forestry – FORCLIMIT; Funded by ERA-GAS, Horizon 2020; Period: 2017-2020
  - MSc Programme in Climate Change and Restoration of Degraded Lands Lifelong Learning Programme funded by the European Commission; Period: 2012-2014
  - Green Technology European Virtual Gateway; Lifelong Learning Programme funded by the European Commission; Period: 2012-2014
  - Improving the conditions for large carnivore conservation – a transfer of best practices (LIFE EX-TRA);  
Funded by the European Commission; Period: 2010-2012
  - Project title: Data collection for economical assessment of National Protected Areas in Romania;  
Funded by the World Bank and United Nations Development Programme; Period: 2011-2012
  - Project title: Integrated Nutrient Pollution Control – Consulting services for development of afforestation plans; Funded by Ministry of Environment and the World Bank; Period: 2009-2012
  - Project title: Training Program for Implementing the Development Strategy of N.F.A. ROMSILVA;  
Funded by the World Bank and Ministry of Forests and Rural Development; Period: 2009
  - Project title: Training Program for the Department of Forests and Territorial Inspectorates; Funded by the World Bank and Ministry of Forests and Rural Development; Period: 2008-2009
  - Estimation of carbon accumulation dynamics through afforestation, using classic and modern tools;  
Funded by the National Council of Scientific Research in Higher Education, BD programme;  
Period: 2008-2010
  - Priority forest, sub-alpine and alpine habitats in Romania; Funded by European Commission (LIFE);  
Period: 2008
  - Modelling of carbon sequestration in transitory forest ecosystems associated with forest land use change in Romania (FORLUC); Funded by the National Council of Scientific Research in Higher Education, PNII programme; Period: 2007-2010
  - Capacity Building for Managing Eastern European High Conservation Value Forests: Romania;  
Funded by DEFRA – Darwin (UK); Period: 2006-2007

