

Zaal Kikvidze, Prof. Ecology

I graduated from Tbilisi State University in 1978. In 1983, I obtained the degree of Candidate of Biological Sciences.

In 1993, I obtained the degree of Doctor of Biological Sciences.

In 1978-1998, I worked in the research institutes of the Georgian Academy of Sciences.

In 1994-1998, I participated in the projects of introducing environmental education and civic education in Georgian schools.

In 1998-2007, I worked as an associate researcher at Chiba University (Japan) and the Estacion Experimental de Zonas Arida, CSIC, Spain.

In 2007-2012, I was an associate professor at the University of Tokyo. As a visiting researcher or professor, I have worked at universities in Germany, Japan, America, Great Britain, Switzerland, France; I carried out research projects in Chile and Mexico. I am a member of the editorial board of *Vegetation Classification and Survey*, editor of the section of *Ethnobotany Research and Applications*; Member of *International Association of Vegetation Ecology* (IAVS) and International Botanical Societies of Georgia, co-founder of ethnobiological society "*Ethnomont*".

2006: I have been cooperating with Ilia State University since its foundation, still as a member of the selection commission and a participant in various ecological and botanical research projects.

Since April 2012, I have been a professor at the Institute of Ecology of Ilia State University

Since July 2013 - Tenured Professor of Ecology. I have published more than 300 works, mainly in plant ecology and ethnobiology.

Since 2015, I have been the director of the Institute of Ethnobiology of Ilia State University.

Since 2016, I have been studying the master's course "Biocenoses: relationships between organisms and their distribution in space (community ecology)".

Also, since 2016, I have been reading the courses "Socio-Ecological Systems: Bioresources and Man", which was replaced by the course "Ethnobotany and Ethnobiology of the Caucasus" in 2019 and continues to this day.

In 2019, I received the Shota Rustaveli National Science Foundation of Georgia publishing state scientific publication grant SP-19-275.

2020-2022 I gave a doctoral seminar in ecology

From 2021 until now, I have been reading the lecture course "Origin of life and biological diversity" within the framework of the one-level program of the medical faculty of the Faculty of Natural Sciences and Medicine of Ilia State University

2021-2023 I was the co-supervisor of the doctoral thesis (in the field of ecology)

2022-2023 I was the co-supervisor of the master's thesis (in the field of ethnobotany)

One of the main problems of today's biology and geography is to clarify the ecological and evolutionary processes that shape biological diversity. There is a need to study these processes at different spatial scales, from local deterministic biotic and abiotic filters to more stochastic processes acting on large spatial and temporal scales, such as dispersal, migrations, and speciation. At the same time, the interaction between man and nature puts on the agenda the connection of natural and public knowledge and the development of science in a new, interdisciplinary way (mode 2). For this, I am researching the relations between natural and social sciences and the regularities of their connection. I consider ethnobiology to be one of the interesting directions of such research

Plant ecology and biodiversity

- Verdú, M., ... Kikvidze, Z., ... and 80 coauthors, 2022. RecruitNet: A global database of plant recruitment networks. *Ecology*, <https://doi.org/10.1002/ecy.3923>
- Losapio, G., Schöb, C., Staniczenko, P.P., Carrara, F., Palamara, G.M., De Moraes, C.M., Mescher, M.C., Brooker, R.W., Butterfield, B.J., Callaway, R.M. and Cavieres, L.A., 2021. Network motifs involving both competition and facilitation predict biodiversity in alpine plant communities. *Proceedings of the National Academy of Sciences*, 118(6), p.e2005759118.
- Jolokhava, T., Abdaladze, O., Gigauri, K. and Kikvidze, Z., 2021. Gradient analysis of soil-plant interactions from the alpine-nival ecotone to the snowline on slopes of the Central Great Caucasus (Kazbegi Region, Georgia). *Ukrainian Botanical Journal*, 78(3), pp.163-175.
- Kenar, N. and Kikvidze, Z., 2020. Climatic drivers of ecological divergence among the genera of the tribe *Stipeae* in Turkey. *Flora*, 270, p.151650.
- Jolokhava, T., Abdaladze, O., Gadilia, S. and Kikvidze, Z., 2020. Variable soil pH can drive changes in slope aspect preference of plants in alpine desert of the Central Great Caucasus (Kazbegi district, Georgia). *Acta Oecologica*, 105, p.103582.
- Jolokhava, T., Abdaladze, O., Asanidze, Z. and Kikvidze, Z., 2020. Distribution of plant species and the rock particle size in subnival habitats of the Central Great Caucasus. *Soil Environ.* 39(2): 194-203.
- Kikvidze, Z., Jolokhava, T., Bakhia, A. and Abdaladze, O., 2020. Jumping the barrier: does a glacier tongue affect species distribution along the elevation gradient in the subnival and nival belts? A case study on Mt. Kazbegi, Georgia, Central Great Caucasus Mountains. *Botanica Serbica*, 44(2), pp.219-229.
- Kenar, N. and Kikvidze, Z., 2019. Climatic drivers of woody species distribution in the Central Anatolian forest-steppe. *Journal of Arid Environments*, 169(10), pp.34-41.
- Kikvidze, Z. and Brooker, R.W., 2019. Quantifying plant interactions: Independent reference is critical for standardising the importance indices. *Journal of Vegetation Science*, 30(2), pp.397-401.

Ethnobiology

- Hengky, S.H. and Kikvidze, Z., 2021. Sustainable Coastal Tourism in Tanjung Kelayang, Indonesia. *Tourism Planning & Development*, 18(3), pp.365-370.
- Hengky, S. H., & Kikvidze, Z. (2018). Tourism sustainability in the Bogor Botanical Gardens, Indonesia. *Urban Forestry & Urban Greening*, 30, 8-11.
- Zenderland, J., Hart, R., Bussmann, R.W., Paniagua Zambrana, N.Y., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Khutsishvili, M. and Batsatsashvili, K., 2019. The use of "Use Value": quantifying importance in ethnobotany. *Economic Botany*, 73(3), pp.293-303
- Bussmann, R.W., Paniagua Zambrana, N.Y., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Batsatsashvili, K., Hart, R.E. and Robbie, E., 2018. Unequal brothers-Plant and fungal use in Guria and Racha, Sakartvelo (Republic of Georgia), Caucasus. *Indian Journal of Traditional Knowledge*, 17(1), pp.7-33.

- Bussmann, Rainer W., Narel Y. Paniagua Zambrana, Inayat Ur Rahman, Zaal Kikvidze, Shalva Sikharulidze, David Kikodze, Davit Tchelidze, Manana Khutsishvili, and Ketevan Batsatsashvili. 2022. “ერთიანობა მრავალფეროვნებაში-საქართველს საკვები მცენარეები და სოფლები.” *Ethnobotany Research and Applications* 23: 1-69.
- Bussmann, R.W., Zambrana, N.Y.P., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Batsatsashvili, K. and Hart, R.E., 2021. ზემოიმერეთს, უანა ფშავის, მესხეთსა და პანკისის ხეობის ეთნობოტანიკა. *Ethnobotany Research and Applications*, 22, pp.1-22.
- Busman, R.V., Sambrana, N.I.P., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Chelidze, D., Batsatsashvili, K. and Hart, R.E., 2021. Upper Imereti, rear Pshavi, Meskheta and Pankisi gorge Ethnobotany. *Ethnobotany Research and Applications*, 22, p.15.
- Bussmann, R.W., Zambrana, N.Y.P., Sikharulidze, S., Kikvidze, Z., Darchidze, M., Manvelidze, Z., Ekhvaia, J., Kikodze, D., Khutsishvili, M., Batsatsashvili, K. and Hart, R.E., 2020. From the sea to the mountains-plant use in Adjara, Samegrelo and Kvemo Svaneti, Sakartvelo (Republic of Georgia), Caucasus. *Ethnobotany Research and Applications*, 20, pp.1-34.
- Bussmann, R.W., Zambrana, N.Y.P., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Khutsishvili, M., Batsatsashvili, K. and Hart, R.E., 2020. An ethnobotany of Kakheti and Kvemo Kartli, Sakartvelo (Republic of Georgia), Caucasus. *Ethnobotany Research and Applications*, 19, pp.1-27.
- Bussmann, R.W., Zambrana, N.P., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Khutsishvili, M., Batsatsashvili, K., Hart, R.E. and Pieroni, A., 2020. Your poison in my pie—the use of Potato (*Solanum tuberosum* L.) leaves in Sakartvelo, Georgia (Caucasus) and Gollobordo, Eastern Albania. *Ethnobotany Research and Applications*, 19, p.07.
- Bussmann, R.W., Zambrana, N.P., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Batsatsashvili, K. and Hart, R.E., 2020. Plants in the spa—the medicinal plant market of Borjomi, Sakartvelo (Republic of Georgia), Caucasus. *Ethnobotany Research and Applications*, 19, p.06.

Other projects

- Tevzadze, G., Zhuravliova, E., Meparishvili, M., Lortkipanidze, T., Shanshiashvili, L., Kikvidze, Z. and Mikeladze, D., 2019. Effects of a Gut Microbiome Toxin, p-Cresol, on the Contents of the NMDA2B Receptor Subunit in the Nucl. Accumbens of Rats. *Neurophysiology*, 51(2), pp.72-76.
- Tevzadze, G., Nanobashvili, Z., Zhuravliova, E., Bilanishvili, I., Shanshiashvili, L., Kikvidze, Z. and Mikeladze, D., 2018. Effects of a gut microbiome toxin, p-Cresol, on the susceptibility to seizures in rats. *Neurophysiology*, 50(6), pp.424-427.
- Tevzadze, G., Oniani, N., Zhuravliova, E., Darchia, N., Elioizishvili, M., Gogichadze, M., Lortkipanidze, N., Oniani, T., Kakabadze, A., Kakabadze, Z. and Karalashvili, L., 2018. Effects of a gut microbiome toxin, p-cresol, on the indices of social behavior in rats. *Neurophysiology*, 50(5), pp.372-377.

Books

- Kikvidze, Z., 2020. *Traditional Ecological Knowledge in Georgia: A Short History of the Caucasus*. Routledge.

- Kikvidze, Z. 2020. *Ethnobiology of Georgia*. Ilia State University

Book chapters

160 chapters in the two following books:

- Batsatsashvili, K., Kikvidze, Z. and Bussmann, R.W. eds., 2020. *Ethnobotany of the Mountain Regions of Central Asia and Altai*. Cham: Springer International Publishing.
- Batsatsashvili, K., Kikvidze, Z. and Bussmann, R.W. eds., 2020. *Ethnobotany of the Mountain Regions of Far Eastern Europe: Ural, Northern Caucasus, Turkey, and Iran*. Springer International Publishing.

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Citations	102086	4401
<i>h</i> -index	35	26

[An extensive list of publications](#)

Zaal Kikvidze, Professor of ecology

List of publications since 2018

Plant ecology and diversity

Michalet, R., Losapio, G., Kikvidze, Z., Brooker, R.W., Butterfield, B.J., Callaway, R.M., Cavieres, L.A., Lortie, C.J., Pugnaire, F.I. and Schöb, C., 2024. Assessing the accuracy of paired and random sampling for quantifying plant–plant interactions in natural communities. *Population Ecology*, 66(1), pp.39-52.

Tedoradze, G., Akobia, I., Janiashvili, Z., Jugeli, T., Lachashvili, N., Megvinetukhutsesi, N., Metreveli, V., Mikeladze, G. and Kikvidze, Z., 2023. The annotated checklist of plant species that occur in the wetland habitats of Georgia (the Caucasus). *Caucasiana*, 2, pp.97-107.

Kenar, N. and Kikvidze, Z., 2023. Modelling the distribution of the Caucasian oak (*Quercus macranthera*) in Western Asia under future climate change scenarios. *Botanica Serbica*, 47(2), pp.215-226.

Verdú, M., ... Kikvidze, Z., ... 80 coauthors, 2022. RecruitNet: A global database of plant recruitment networks. *Ecology*, e3923; <https://doi.org/10.1002/ecy.3923>

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Jolokhava, T., Abdaladze, O., Gigauri, K. and Kikvidze, Z., 2021. Gradient analysis of soil–plant interactions from the alpine–nival ecotone to the snowline on slopes of the Central Great Caucasus (Kazbegi Region, Georgia). *Ukrainian Botanical Journal*, 78(3), pp.163-175.

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Bussmann, R.W., Paniagua Zambrana, N.Y., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Batsatsashvili, K., Hart, R.E. and Robbie, E., 2018. Unequal brothers-Plant and fungal use in Guria and Racha, Sakartvelo (Republic of Georgia), Caucasus. *Indian Journal of Traditional Knowledge*, 17(1), pp.7-33.

Bussmann, Rainer W., Narel Y. Paniagua Zambrana, Inayat Ur Rahman, Zaal Kikvidze, Shalva Sikharulidze, David Kikodze, Davit Tchelidze, Manana Khutsishvili, and Ketevan Batsatsashvili. 2022. “ერთიანობა მრავალფეროვნებაში-საქართველოს საკვები მცენარეები და სოკოები.” *Ethnobotany Research and Applications* 23: 1-69.

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Bussmann, R.W., Zambrana, N.Y.P., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Batsatsashvili, K. and Hart, R.E., 2021. ზემო იმერეთის, უკანა ფშავის, მესხეთისა და პანკისის ხეობის ეთნობოტანიკა. *Ethnobotany Research and Applications*, 22, pp.1-22.

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Bussmann, R.W., Zambrana, N.P., Sikharulidze, S., Kikvidze, Z., Kikodze, D., Tchelidze, D., Khutsishvili, M., Batsatsashvili, K., Hart, R.E. and Pieroni, A., 2020. Your poison in my pie—the use of Potato (*Solanum tuberosum* L.) leaves in Sakartvelo, Georgia (Caucasus) and Gollobordo, Eastern Albania. *Ethnobotany Research and Applications*, 19,07.

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Other projects

Tevzadze, G., Zhuravliova, E., Meparishvili, M., Lortkipanidze, T., Shanshiashvili, L., Kikvidze, Z. and Mikeladze, D., 2019. Effects of a Gut Microbiome Toxin, p-Cresol, on the Contents of the NMDA2B Receptor Subunit in the *Nucleus Accumbens* of Rats. *Neurophysiology*, 51(2), pp.72-76.

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