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Biodiversity monitoring in Sno valley (Georgia, Caucasus)**Eter Abulidze**

Iliia State University, Georgia

The valley of Sno in Georgia (Caucasus) is reach with its biological and landscape diversity (<http://www.apa.gov.ge>) and is one of the most popular destinations for tourists. Currently hydro-electric stations and pylons are planned to deploy in Sno valley, which is supposed to have an impact on the biodiversity of the area. Previous studies have shown that the development of high voltage electro-power transmission system could affect local biodiversity either by destruction of physical environment and by direct influence of electro-magnetic field on plants and animals (<https://electricalnotes.wordpress.com> 2012.02.17). The direct effects on biodiversity could be numerous. As power lines are particularly bright and their Ultra Violet light is visible for most of the animal species, it will become physical barrier for them which in turn could pose a problem during the migration (<https://www.theguardian.com> 12 March 2014). Some bird species (Great Rosefinch (*Carpodacus rubicilla*), Guldenstadt's Redstart (*Phoenicurus erythrogaster*) and Chiffchaff, (*Phylloscopus collybita*) spend their lifetime on Sno valley (N. Paposhvili et al., 2016). In winter, they use the Sea-buckthorn for feeding which is mostly occurring in the areas where the pylon will be deployed. The large part of this wintering habitat is already destroyed which means that, specific bird species will face to significant problems. High voltage electro-magnetic field have also shown to affect animal and plant species health, development and germination (Balaji, A. 2015; Dib & Mordjaoui, 2014). Hence, monitoring of local biodiversity is an important issue for its maintenance and conservation. The proposed research will help to develop biodiversity database that could serve as a baseline for future biomonitoring of the impact of hydro-electric constructions. In particular, from April I am doing to accurately evaluate the forest coverage in the valley and generate distributional database for wooded plants, bird, large mammal and reptile species.

Biography

Eter Abulidze from Georgia (Caucasus), is a 3rd year Ph.D student at the Iliia State university, Faculty of Natural Sciences and Engineering, She is working as a Researcher at the Institute of Ecology (2013–2014/2016-2017). Also She has the financial support as a Researcher for the biodiversity monitoring program from German NGO GIZ (2017). During two years She was studied in Italy University of Tuscia, Department of Dafne, as an Ph.D exchange student (Erasmus Mundus program) molecular genetics' laboratory and worked molecular-genetic analysis of Nordman's Fir (*Abies nordmannian*) and Eastern spruce (*Picea orientalis*) in Caucasus region (2014-2016). She was involved in "Spiral Methodology Seminar" at Greece City of Kavala. She has a Master's Degree in Ecology and Conservation Biology and Bachelor's Degree in Biology and Ecology.

eter.abulidze.1@iliauni.edu.ge

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