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## The checklist of trees of Georgia (Caucasus) and their provisional regional assessment according to IUCN categories and criteria

### Abstract

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A checklist of trees distributed in Georgia is presented for the first time. The checklist includes 129 species of vascular plants. They belong to 52 genera and 28 families. Of 129 species 6 are represented by two subspecies and 1 by two varieties. On the whole, the checklist includes 136 taxa. For each taxon (species, subspecies and varieties) a regional, expert based, assessment, according to IUCN criteria, are provided. Regionally (in Georgia) 9 taxa are critically endangered (CR), 4 endangered (EN), 9 vulnerable (VU), and 15 are near threatened (NT). Due to the lack of data, 33 taxa could not be assessed and fell under the category of data deficient. 66 taxa resulted not endangered so far and have been assigned to the category least concern (LC). References to taxonomy, key synonyms, assessment argumentation and references used in provisional species assessment are given for each taxon.

*Key words:* conservation, native flora, floristic composition.

### Introduction

Georgia, despite its small size, is characterized by both floristic and ecosystem diversity. More than 4000 species of vascular plants are distributed here (Davlianidze & al. 2018). In terms of habitat creation, trees occupy a prominent place among them.

In Georgia, trees are distributed in different climate zones from the lowlands to the subalpine belt. They grow on humid, as well as on arid and semi-arid ecotopes, also in wetlands. Accordingly, the trees common in Georgia are represented by species of different bioecology. Due to the above, their floristic composition is rich.

Trees are especially important for maintaining the Earth's ecological balance. In addition, their use is versatile. Therefore, they are under constant anthropogenic pressure (felling, grazing, etc.). Thus, their recording, condition evaluation and assessment, according to the international standards, are an urgent issue. Despite the above, the composition of trees common in Georgia is still unknown and no checklist exists for them either.

The aim of our research was to compile a checklist of trees of Georgia and to make their regional provisional assessments according to IUCN categories and criteria, which will promote the protection and conservation for this group of plants.

## Materials and methods

In addition to our own research, the second edition of “Flora of Georgia” (Ketskhoveli 1971-1983; Gagnidze 1985-2011) and the “Nomenclatural checklist of flora of Georgia” (Davlianidze & al. 2018) laid the foundation for the creation of the checklist.

Names and authors of taxa are checked with the international databases: Euro+Med (2006-), The Plant List (2013), GBIF.org (2022), IPNI (2022), POWO (2022), Tropicos.org (2022), WFO (2022). As a result, some of the “narrow” species included in the “Flora of Georgia” (Ketskhoveli 1971-1983; Gagnidze 1985-2011) and the “Nomenclatural checklist of flora of Georgia” (Davlianidze & al. 2018) could not be found in this checklist. These species are given as subspecies or as synonyms.

Provisional taxa assessment and categorization were carried out in accordance with IUCN Red List (2021) criteria. Our assessment of taxa is based on our own research, literary data, results of various concluded and ongoing projects and materials preserved in various herbariums of Georgia (TBI, TGI, BATU). Some taxa are assessed based on the data from the “Red list of the endemic plants of the Caucasus” (Solomon & al. 2013). The verbal information of various researchers is also used.

The calculation of the extent of occurrence (EOO) and the area of occupancy (AOO) of the taxa, the exact distribution coordinates of which we did not have, was carried out on the basis of literature and herbarium data.

## Description of study area

Georgia is located in the central part of Caucasus Ecoregion between latitudes 41°07' and 43°35'N, and longitudes 40°04' and 46°44' (Fig. 1). Its area is 69,700 km<sup>2</sup> and hypsometric amplitude ranges from -1 m a.s.l. (Kolkheti lowland) to 5203 m a.s.l. (Mt. Shkhara) (Gobejishvili 2012; Bolashvili & al. 2018).

From a geotectonic point of view, the territory of Georgia belongs to the central part of the Alpine-Himalayan folds (Gobejishvili 2012; Bolashvili & al. 2018).

Georgia is a mountainous country with a diverse and difficult relief. There are three main morphological units: the middle and high mountainous relief of the Caucasus ridge, the intermountain bar and the mountains of southern Georgia (Gobejishvili 2012; Bolashvili & al. 2018).

Georgia is situated on the northern edge of the subtropical climate zone and is under the influence of subtropical, temperate and high-altitude circulatory processes. Despite the small area, almost all types of subtropical climate zones are established on the territory of Georgia, in particular, 23 types of climate are distinguished. Such diversity of climate is due to the location of Georgia and its difficult physical-geographical conditions (Kordzakhia 1961; Gobejishvili 2012; Bolashvili & al. 2018).



Fig. 1. Location of Georgia in the Caucasus Ecoregion.

The territory of Georgia is characterized by diversity of soils. Forty-eight types of soil are recorded there. Both moist and dry soils are presented. Moist and wet soils of acidic reaction mostly predominate in Western Georgia, while dry alkaline and neutral soils prevail in Eastern Georgia (Urushadze 1999, 2016; Gobejishvili 2012; Bolashvili & al. 2018).

## Results

129 species of trees, which belong to 52 genera and 28 families of vascular plants, are recorded in Georgia. 6 species are represented by two subspecies and one species by two varieties.

This data does not include non-native trees, which have spread in Georgia for various reasons and in different forms.

It is worth noting that the presented list also includes the species of woody plants, which mainly are shrubs and are rarely found in tree forms. The checklist does not include *Swida armasica* (Sanadze) Gvin., which is not universally taxonomically recognized (Euro+Med 2006-; The Plant List 2013; GBIF.org 2022; IPNI 2022; POWO 2022; Tropicos 2022; WFO 2022).

According to the regional (Georgia) IUCN Red List assessments, 9 taxa are critically endangered (CR), 4 are endangered (EN), 9 are vulnerable (VU), and 15 are close to vulnerable (NT). The endangered taxa are distributed according to IUCN categories as follows:

**Critically Endangered (CR)** – *Arbutus andrachne* L., *Buxus sempervirens* L., *Populus euphratica* Oliver, *Pyrus demetrii* Kuth., *P. ketzkhoveli* Kuth., *P. sachokiana* Kuth., *P. takhtadzhianii* Fed., *Sorbus caucasica* Zinserl., *S. hajastana* Gabrieljan;

**Endangered (EN)** – *Pinus brutia* Ten. var. *pityusa* (Steven), *Betula megrelica* Sosn., *Pyrus fedorovii* Kuth., *Celtis planchoniana* K.I.Chr.;

**Vulnerable (VU)** – *Acer ibericum* M. Bieb., *A. sosnowskyi* Doluch., *Betula medwediewii* Regel, *B. raddeana* Trautv., *Pistacia atlantica* Desf., *Quercus pontica* K. Koch, *Q. robur* subsp. *imeretina* (Steven ex Woronow) Menitsky, *Q. robur* subsp. *pedunculiflora* (K. Koch), *Zelkova carpinifolia* (Pall.) K. Koch;

**Near Threatend (NT)** – *Celtis australis* subsp. *caucasica* (Willd.) C.C. Towns., *Crataegus pontica* (K. Koch) Menitsky, *Juglans regia* L., *Populus canescens* (Aiton) Sm., *P. nigra* L., *Pterocarya pterocarpa* (Michx.) Kunth ex I. Iljinsk., *Pyrus oxyprion* Woronow, *Quercus macranthera* Fisch. & C.A. Mey. ex Hohen., *Salix excelsa* S.G. Gmel., *S. wilhelmsiana* M. Bieb., *Sorbus buschiana* Zinserl., *S. velutina* (Albov) Schneid., *Ulmus elliptica* K. Koch, *U. glabra* Huds., *U. minor* Mill.

Due to data deficiency, 33 taxa could not be evaluated and were assigned the category **Data Deficient (DD)**. They are: *Abies nordmanniana* (Steven) Spach, *Acer cappadocicum* subsp. *divergens* (K. Koch ex Pax) A.E. Murray, *A. hyrcanum* Fisch. & C.A. Mey., *A. pseudoplatanus* L., *A. tataricum* L., *A. velutinum* Boiss., *Castanea sativa* Mill., *Celtis australis* L. subsp. *australis*, *Corylus avellana* var. *pontica* (K. Koch) H.J.P.Winkl., *C. colurna* L., *Crataegus caucasica* K. Koch, *C. pseudoheterophylla* Pojark., *Cydonia oblonga* Mill., *Fraxinus angustifolia* subsp. *oxycarpa* (Willd.) Franco & Rocha Afonso, *Fraxinus excelsior* subsp. *coriariifolia* (Scheele) A.E.Murray, *Laurus nobilis* L., *Ostrya carpinifolia* Scop., *Populus alba* L., *P. hyrcana* Grossh., *Prunus padus* L., *Pyrus communis* L. subsp. *communis* (*P. balansae* Decne.), *P. georgica* Kuth., *Quercus hartwissiana* Steven, *Salix armeno-rossica* A.K. Skvortsov, *S. elbursensis* Boiss., *Sorbus colchica* Zinserl., *S. fedorovii* Zaik., *S. turcica* Zinserl., *Tamarix tetrandra* Pall. ex M. Bieb., *Taxus baccata* L., *Tilia cordata* Mill., *Vitex agnus-castus* L., *Ziziphus jujuba* Mill.

Although most of the trees are under anthropogenic pressure and a significant proportion of them grow in close to extreme environments, most of them (66 taxa) are not endangered and have been assessed as **Least Concern (LC)**.

Below is a checklist of trees distributed in Georgia. Taxa are sorted by families. For each taxon (species and subspecies) the reference to taxonomy, the IUCN Red List category and criteria, the assessment argumentation and the references used in species assessment are given.

## GYMNOSPERMAE

### CUPRESSACEAE

*Juniperus communis* var. *saxatilis* Pall. (*J. oblonga* M. Bieb.; *J. communis* subsp. *oblonga* (M. Bieb.) Galushko]

*References to taxonomy:* The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Lachashvili (1971); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Shetekauri & Chelidze (2016); Lachashvili & al. (2017); Lachashvili & Eradze (2017); Shetekauri (2017).

***Juniperus excelsa*** M. Bieb. (*J. isophyllos* K. Koch.)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Lachashvili (1971).

***Juniperus foetidissima*** Willd.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1971); Lachashvili & al. (2007); Lachashvili & Eradze (2017).

***Juniperus oxycedrus*** L. (*J. rufescens* Link)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & Eradze (2017); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Lachashvili (1971); Lachashvili & al. (2004), (2014); Lachashvili & Eradze (2017); Shetekauri (2017).

***Juniperus polycarpus*** K. Koch [*J. excelsa* subsp. *polycarpus* (K. Koch) Takht.]

*References to taxonomy:* The Plant List (2013); Davlianidze & al. (2018); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1971); Lachashvili & al. (2004, 2014); Lachashvili & Eradze (2017).

*PINACEAE****Abies nordmanniana*** (Steven) Spach

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1971); Gagnidze & Kemularia-Natadze (1985); Kvachakidze (1985), (2001); Dolukhanov (2010); Shetekauri & Chelidze (2016).

***Picea orientalis*** (L.) Peterm.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1971); Gagnidze & Kemularia-Natadze (1985); Kvachakidze (1985), (2001); Dolukhanov (2010); Shetekauri & Chelidze (2016).

***Pinus brutia*** var. ***pityusa*** (Steven) Silba [*P. pityusa* Steven; *P. brutia* subsp. *pityusa* (Steven) Nahal.]

*References to taxonomy:* The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* EN;

*Assessment argumentation:* the taxon is assessed based on Solomon & al. (2013) [12];

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1971); Kvachakidze (2001); Dolukhanov (2010); Solomon & al. (2013).

***Pinus sylvestris*** var. ***hamata*** Steven [*P. kochiana* K. Klotzsch ex K. Koch; *P. sylvestris* subsp. *hamata* (Steven) Fomin; *P. sosnowskyi* Nakai]

*References to taxonomy:* The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1971); Gagnidze & Kemularia-Natadze (1985); Kvachakidze (1985), (2001); Lachashvili & Mamukelashvili (1986); Dolukhanov (2010); Shetekauri & Chelidze (2016); Shetekauri (2017).

## TAXACEAE

***Taxus baccata* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1971); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Kvachakidze (2001); Shetekauri & Chelidze (2016); Goginashvili & Tvauro (2021).

## ANGIOSPERMAE

## DICOTYLEDIONEAEE

## ANACARDIACEAE

***Cotinus coggygria* Scop.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Lachashvili 1983a; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili, (1986); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Pistacia atlantica* Desf. [*P. mutica* Fisch. & C.A.Mey.; *P. atlantica* subsp. *mutica* (Fisch. & C. A. Mey.) Rech. f.]**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. 2020; GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU B1 ab (iii);

*Assessment argumentation:* extent of occurrence - <20000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, area – fragmented, number of area fragments – 7, decline in habitat quality caused by cutting and grazing;

*References used in species assessment:* Ketskhoveli (1960); Lachashvili 1983a; Lachashvili & al. 2020.

***Rhus coriaria* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Lachashvili 1983a; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Lachashvili & Eradze (2017); Shetekauri (2017).

#### *AQUIFOLIACEAE*

##### ***Ilex colchica*** Pojark.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze 1983a; Gagnidze & Kemularia-Natadze (1985); Dmitrieva (1990a); Kvachakidze (2001); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

#### *BETULACEAE*

##### ***Alnus glutinosa*** subsp. ***barbata*** (C.A. Mey.) Yalt. (*A. barbata* C.A. Mey.)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Dolokhanov (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Dolokhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

##### ***Alnus incana*** (L.) Moench

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Dolokhanov (1975); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Shetekauri (2017).

##### ***Betula litwinowii*** Doluch. [*B. pubescens* var. *litwinowii* (Doluch.) Ashburner & McAll.]

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected

threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Dolokhanov (1975); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dolukhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017); I. Akobia's field data (2012-2020) was used to assess the species.

***Betula medwediewii*** Regel

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU B1ab (iii);

*Assessment argumentation:* extent of occurrence - <20000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, area – fragmented, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Dolokhanov (1975); I. Akobia's field data (2012-2020) was used to assess the species.

***Betula megrelica*** Sosn.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* EN B1ab (iii, v) + 2ab (iii, v);

*Assessment argumentation:* extent of occurrence - <5000 km<sup>2</sup>, area of occupancy - <500 km<sup>2</sup>, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Dolokhanov (1975); IUCN (2021);

***Betula pendula*** Roth

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Dolokhanov (1975); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017); I. Akobia's field data (2012-2020) was used to assess the species.

***Betula raddeana*** Trautv.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU B2ab (iii);

*Assessment argumentation:* extent of occurrence - <20000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, area – fragmented, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Dolokhanov (1975); Sakhokia & Khutzishvili

(1975); Shetekauri (2017); I. Akobia's field data (2012-2020) was used to assess the species.

#### *BUXACEAE*

##### ***Buxus sempervirens*** L. (*B. colchica* Pojark.)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR A2acde;

*Assessment argumentation:* Population reduction – 95%;

*References used in species assessment:* Ketskhoveli (1960); Gagnidze (1983b); Dmitrieva (1990a); Matchutadze & al. (2013); Gagnidze & Kemularia-Natadze (1985); Mitchell & al. (2018); Supatashvili & al. 2019; B. Berdzenishvili's field data (2018)-2020) was used to assess the species.

#### *CELASTRACEAE*

##### ***Euonymus europaeus*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze 1983c; Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

##### ***Euonymus latifolius*** (L.) Mill.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze 1983c; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

##### ***Euonymus leiophloeus*** Steven

*References to taxonomy:* Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze 1983c; Dmitrieva (1990a); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

#### CORNACEAE

***Cornus iberica*** Woronow [*Swida iberica* (Woronow) Pojark. ex Grossh.]

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ghviniashvili 1984; Lachashvili & Eradze (2017); Lachashvili & al. (2017).

#### ***Cornus mas*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ghviniashvili 1984; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Cornus sanguinea*** subsp. ***australis*** (C. A. Mey.) Jav. [*C. australis* C. A. Mey.; *Swida australis* (C.A. Mey.) Pojark. ex Grossh.; *S. koenigii* (C. K. Schneid.) Pojark. ex Grossh.]

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ghviniashvili 1984; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

#### CORYLACEAE

***Carpinus betulus*** L. (*C. caucasica* Grossh.)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Kemularia-Natadze (1975)a; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001); Lachashvili & al. (2007); Dolukhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Carpinus orientalis* Mill.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Kemularia-Natadze (1975)a; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001); Lachashvili & al. (2007); Dolukhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Corylus avellana* L. var. *avellana***

*References to taxonomy:* Güner (2012); GBIF.org (2022); POWO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kemularia-Natadze (1975)a; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Corylus avellana* var. *pontica* (K. Koch) H.J.P.Winkl. (*C. imeretica* Kem.-Nath.; *C. pontica* K. Koch)**

*References to taxonomy:* Güner (2012); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* kemularia-Natadze (1975)a; Gagnidze & Kemularia-Natadze (1985).

***Corylus colurna* L. (*C. iberica* Wittm. ex Kem.-Nath.; *C. kachetica* Kem.-Nath.)**

*References to taxonomy:* Euro+Med (2006-); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* kemularia-Natadze (1975)a; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Ostrya carpinifolia* Scop.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* kemularia-Natadze (1975)a; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Shetekauri & Chelidze (2016).

**EBENACEAE**

***Diospyros lotus* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kutateladze (1985)a; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986).

**ELAEAGNACEAE**

***Elaeagnus angustifolia* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Lachashvili 1984; Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Hippophae rhamnoides* L. [*Elaeagnus rhamnoides* (L.) A.Nelson]**

*References to taxonomy:* Euro+Med (2006-); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected

threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Sakhokia & Khutzhishvili (1975); Lachashvili 1984; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

#### ERICACEAE

##### ***Arbutus andrachne* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR B2 ab (iii, v);

*Assessment argumentation:* area – fragmented, number of area fragments – 2, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Gagnidze (1985)a; Dmitrieva (1990b); Goginashvili & al. (2018); Aliev & al. 2020.

*Note: the authors of the article (N. Lachashvili, K. Kereselidze and M. Kikvidze) categorically distances from mentioning the integral part of Georgia - Abkhazia - as an independent state in the certified article (Aliev & al. 2020) and protest against the mentioned scientific journal.*

##### ***Vaccinium arctostaphylos* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze (1985)b; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990b); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

#### FAGACEAE

##### ***Castanea sativa* Mill.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Ketskhoveli (1960); Gagnidze (1975); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001); Dolukhanov (2010); Tavadze & al. (2013).

***Fagus orientalis*** Lipsky

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Gagnidze (1975); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001); Lachashvili & al. (2007); Dolukhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Quercus hartwissiana*** Steven

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Gagnidze (1975); Gagnidze & Kemularia-Natadze (1985); Dmitrieva (1990a); Dolukhanov (2010); Matchutadze & al. (2013).

***Quercus macranthera*** Fisch. & C.A. Mey. ex Hohen.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Ketskhoveli (1960); Gagnidze (1975); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Kvachakidze (2001); Dolukhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Quercus petraea*** subsp. ***iberica*** (Steven ex M.Bieb.) Krassiln. (*Q. iberica* Steven ex M. Bieb.; *Q. dshorochensis* K. Koch)

*References to taxonomy:* Euro+Med (2006-); Güner, 2012; The Plant List (2013); Lachashvili & al. (2021); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Gagnidze (1975); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001);

Lachashvili & al. (2007); Dolukhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Quercus pontica*** K. Koch

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU B2ab (iii);

*Assessment argumentation:* extent of occurrence - <20000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, the species is assessed based on Solomon & al. (2013);

*References used in species assessment:* Gagnidze (1975); Dmitrieva (1990a); Solomon & al. (2013).

***Quercus robur*** subsp. *imeretina* (Woronow) Menitsky (*Q. imeretina* Woronow)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU B2ab (iii);

*Assessment argumentation:* extent of occurrence - <20000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, the taxon is assessed based on Solomon & al. (2013);

*References used in species assessment:* Gagnidze (1975); Gagnidze & Kemularia-Natadze (1985); Dmitrieva (1990a); Dolukhanov (2010); Solomon & al. (2013); Goginashvili & Tvauri (2021).

***Quercus robur*** subsp. *pedunculiflora* (K. Koch) Menitsky (*Q. pedunculiflora* K. Koch)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU B1ab (I, ii, iii);

*Assessment argumentation:* extent of occurrence - <20000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, area – fragmented, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Gagnidze (1975); Sakhokia & Khutzhishvili (1975); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Dolukhanov (2010); Lachashvili & Eradze (2017); Goginashvili & Tvauri (2011).

**JUGLANDACEAE**

***Juglans regia*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Ketskhoveli (1960); kemularia-Natadze (1975)b; Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007).

***Pterocarya pterocarpa*** (Michx.) Kunth ex I. Iljinsk. [*Juglans pterocarpa* Michx.]

*References to taxonomy:* Güner (2012); The Plant List (2013); Davlianidze & al. (2018); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Ketskhoveri (1960); Kemularia-Natadze (1975)b; Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Dolukhanov (2010).

## LAMIACEAE

*Vitex agnus-castus* L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Lachashvili (1985).

## LAURACEAE

*Laurus nobilis* L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* kemularia-Natadze (1973); Dmitrieva (1990a).

## MALVACEAE (TILIACEAE)

*Tilia begoniifolia* Steven [*T. caucasica* Rupr.; *T. rubra* subsp. *caucasica* (Rupr.) V. Engl.; *Tilia dasystyla* subsp. *caucasica* (V. Engl.) Pigott]

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); Lachashvili & al. (2021); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Cholokashvili 1983; Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

*Tilia cordata* Mill.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of

occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Cholokashvili 1983; Shetekauri (2017); Goginashvili & Tvauri (2021).

#### MORACEAE

##### ***Ficus carica*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Shkhian (1975)a; Lachashvili & al. (2007); Lachashvili & Eradze (2017).

#### OLEACEAE

##### ***Fraxinus angustifolia*** subsp. ***oxycarpa*** (Willd.) Franco & Rocha Afonso (*F. oxycarpa* Willd.)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze (1985)b; Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

##### ***Fraxinus excelsior*** subsp. ***coriariifolia*** (Scheele) A.E.Murray (*F. coriariifolia* Scheele)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze (1985)b; Lachashvili & al. (2007).

##### ***Fraxinus excelsior*** L. subsp. ***excelsior***

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Sakhokia & Khutzishvili (1975); Kutateladze (1985)b; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al.

(1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

#### *RHAMNACEAE*

##### ***Frangula alnus* Mill.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Mukbaniani 1983; Gagnidze & Kemularia-Natadze, (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Lachashvili & Eradze (2017); Shetekauri (2017).

##### ***Rhamnus cathartica* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Mukbaniani 1983; Lachashvili & Mamukelashvili (1986); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

##### ***Ziziphus jujuba* Mill.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Mukbaniani 1983.

#### *ROSACEAE*

##### ***Crataegus caucasica* K. Koch**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Mukbaniani 1980; Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Crataegus kyrtostyla*** Fingerh. (*C. monogyna* Jacq.)

*References to taxonomy:* The Plant List (2013); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Mukbaniani 1980; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Crataegus meyeri*** Pojark.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Mukbaniani 1980; Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Crataegus orientalis*** Pall. ex M. Bieb.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Mukbaniani 1980; Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Crataegus pentagyna*** Waldst. & Kit. ex Willd.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Mukbaniani 1980; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili &

Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Crataegus pontica*** K. Koch [*C. azarolus* var. *pontica* (K.Koh) K.I.Chr.]

*References to taxonomy:* Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Mukbaniani 1980; Mardaleishvili & Tskhadadze 2003; Lachashvili & al. (2017); Lachashvili & Eradze (2017).

***Crataegus pseudoheterophylla*** Pojark.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Mukbaniani 1980; Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Cydonia oblonga*** Mill.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze 1980a; Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Lachashvili & Eradze (2017).

***Malus orientalis*** Uglitzk. [*M. sylvestris* subsp. *orientalis* (Uglitzk.) Browicz]

*References to taxonomy:* Plant List (2013); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Kutateladze & 1980b; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Mespilus germanica* L. [*Crataegus germanica* (L.) Kintze]**

*References to taxonomy:* The Plant List (2013); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); GBIF.org (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kutateladze 1980c; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Prunus avium* (L.) L. [*Cerasus avium* (L.) Moench; *C. silvestris* Garsault]**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & Eradze (2017); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Ghvinianidze 1980a; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Prunus divaricata* Ledeb. (*P. cerasifera* Ehrh.)**

*References to taxonomy:* Güner (2012); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Ghvinianidze 1980b; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Prunus laurocerasus* L. (*Laurocerasus officinalis* M. Roem.)**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ghvinianidze 1980c; Gagnidze & Kemularia-

Natadze (1985); Gagnidze & al. (1985); Lachahsvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Prunus mahaleb*** L. subsp. ***mahaleb*** [*Cerasus mahaleb* (L.) Mill.]

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Lachashvili & Eradze (2017); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ghvinianidze 1980a; Lachashvili & al. (2007); Lachashvili & Eradze (2017).

***Prunus padus*** L. (*Padus avium* Mill.)

*References to taxonomy:* Euro+Med (2006-); The Plant list (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Ghvinianidze 1980d; Gagnidze & al. (1985); Lachahsvili & Mamukelashvili (1986); Shetekauri & Chelidze (2016); Shetekauri (2017).

***Pyrus communis*** subsp. ***caucasica*** (Fed.) Browicz

*References to taxonomy:* Euro+Med (2006-); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Kutateladze 1980d; Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Pyrus communis*** L. subsp. ***communis*** (*Pyrus balansae* Decne.)

*References to taxonomy:* Euro+Med (2006-); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze 1980d; Dmitrieva (1990a).

***Pyrus demetrii*** Kuth.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR D;

*Assessment argumentation:* extent of occurrence – 309 km<sup>2</sup>, area of occupancy – 28 km<sup>2</sup>, area – fragmented, number of area fragments – 7, decline in habitat quality caused by land use and grazing;

*References used in species assessment:* Kutateladze 1980d; Goginashvili & Tvauri (2011); Lachashvili & Eradze (2017); Lachashvili & al. (2017); K. Kereselidze's field data (2019-2020) was used to assess the species.

***Pyrus fedorovii*** Kuth.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* EN B1ab (iii, v);

*Assessment argumentation:* extent of occurrence – 529 km<sup>2</sup>, area of occupancy - < 500 km<sup>2</sup>, area – fragmented, number of area fragments – 4, decline in habitat quality caused by land use and grazing;

*References used in species assessment:* Makashvili 1952; Kutateladze 1980d; Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Pyrus georgica*** Kuth.

*References to taxonomy:* The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze 1980d; Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Pyrus ketzkhovelii*** Kuth.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR B2ab (iii);

*Assessment argumentation:* extent of occurrence – <100 km<sup>2</sup>, area of occupancy - <10 km<sup>2</sup>, number of area fragments – 1, decline in habitat quality, caused by land use and grazing;

*References used in species assessment:* Kutateladze 1980d; Lachashvili & Eradze (2017); Lachashvili & al. (2017); K. Kereselidze's field data (2019-2020) was used to assess the species.

***Pyrus oxyprion*** Woronow

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and / or likely to be close to it in the future;

*References used in species assessment:* Kutateladze 1980d; Lachashvili & al. (2007).

***Pyrus sachokiana* Kuth.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR D;

*Assessment argumentation:* extent of occurrence – 6778 km<sup>2</sup>, area of occupancy – 20 km<sup>2</sup>, area – fragmented, number of area fragments – 5, decline in habitat quality caused by land use and grazing; Number of mature individuals – 29;

*References used in species assessment:* Kutateladze 1980d; Lachashvili & al. (2007); Goginashvili & Tvauri (2011); Lachashvili & Eradze (2017); K. Kereselidze's field data (2019-2020) was used to assess the species.

***Pyrus salicifolia* Pall.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kutateladze (1980d); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Pyrus takhtadzhianii* Fed.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR B1ab (iii) + 2ab (iii);

*Assessment argumentation:* extent of occurrence - < 100 km<sup>2</sup>, area of occupancy - <10 km<sup>2</sup>, area – fragmented, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Kutateladze 1980d.

***Sorbus aucuparia* L. (*S. boissieri* Schneid.; *S. caucasigena* Kom. ex Gatsch.)**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kutateladze (1980e); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Sorbus buschiana*** Zinserl.

*References to taxonomy:* The Plant List (2013); Davlianidze & al. (2018); WFO (2022);  
*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Sakhokia & Khutzishvili (1975); Kutateladze (1980e); Shetekauri (2017).

***Sorbus caucasica*** Zinserl.

*References to taxonomy:* Güner (2012); The Plant List (2013); Davlianidze & al. (2018); WFO (2022);

*IUCN red list category and criteria:* CR B2 ab (iv);

*Assessment argumentation:* extent of occurrence - <100 km<sup>2</sup>, area of occupancy - <10 km<sup>2</sup>, number of area fragments – 1; poor regeneration ability, continuing decline in mature individuals;

*References used in species assessment:* Kutateladze (1980e); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Shetekauri & Chelidze (2016); K. Kereselidze's field data (2019-2020) was used to assess the species.

***Sorbus colchica*** Zinserl. [*Aira colchica* (Zinserl.) Mezhenkyj]

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); Tropicos.org (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze (1980e); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Dmitrieva (1990a).

***Sorbus fedorovii*** Zaik.

*References to taxonomy:* The Plant List (2013); Davlianidze & al. (2018); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze (1980e); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a).

***Sorbus graeca*** (Spach) Lodd. ex Schauer [*Aira graeca* (Spach) M. Roem.]

*References to taxonomy:* Euro+Med (2006-); Güner (2012); The Plant List (2013); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); Tropicos.org (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kutateladze (1980e); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Sorbus hajastana*** Gabrieljan

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR B1ab (iii) + 2ab (iii); CR D;

*Assessment argumentation:* extent of occurrence - <100 km<sup>2</sup>, area of occupancy - 4 km<sup>2</sup>, number of area fragments – 1, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Shetekauri (2017).

***Sorbus subfusca*** (Ledeb. ex Nordm.) Boiss.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kutateladze (1980e); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Shetekauri (2017).

***Sorbus torminalis*** (L.) Crantz. [*Torminalis glaberrima* (Gand.) Sennikov & Kurtto]

*References to taxonomy:* Euro+Med (2006-); Güner (2012); The Plant List (2013); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); Tropicos.org (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Kutateladze (1980e); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Sorbus turcica*** Zinserl. [*Aria umbellata* (Desf.) Sennikov & Kurtto]

*References to taxonomy:* Euro+Med (2006-); Güner (2012); The Plant List (2013); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021); Tropicos.org (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Kutateladze (1980e).

***Sorbus velutina*** (Albov) C.K. Schneid.

*References to taxonomy:* The Plant List (2013); Davlianidze & al. (2018); WFO (2022);  
*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Kutateladze (1980e).

**SALICACEAE**

***Populus alba*** L. [*P. nivea* (Aiton) Willd.; *P. pseudonivea* Grossh.]

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Shkhian (1973); Makashvili 1952.

***Populus canescens*** (Aiton) Sm.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Ketskhoveli (1960); Shkhian (1973); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Lachashvili & Eradze (2017).

***Populus euphratica*** Oliver

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* CR B1ab (v) + B2ab (v);

*Assessment argumentation:* extent of occurrence - <100 km<sup>2</sup>, area of occupancy - <10 km<sup>2</sup>, number of area fragments – 1;

*References used in species assessment:* Shkhian (1973); Lachashvili & al. (2007); Goginashvili & Tvauri (2011), (2021).

***Populus hyrcana*** Grossh.

*References to taxonomy:* Solomon & al. (2013); The Plants list (2013); Davlianidze & al. (2018); GBIF.org (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Shkhian (1973); Solomon & al. (2013).

***Populus nigra* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Ketskhoveli (1960); Shkhian (1973); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Lachashvili & Eradze (2017).

***Populus tremula* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Shkhian (1973); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990b); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Salix alba* L. subsp. *alba***

*References to taxonomy:* Güner (2012); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Shkhian (1973); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Salix alba* subsp. *micans* (Andersson) Rech. f.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Shkhian (1973); Makashvili 1952; Gagnidze & al. (1985); Gagnidze & Kemularia-Natadze (1985); Dmitrieva (1990b); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Salix armeno-rossica* A.K. Skvortsov**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Shkhian (1973); Shetekauri & Chelidze (2016).

***Salix caprea* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Shkhian (1973); Sakhokia & Khutzishvili (1975); Gagnidze & Kemularia-Natadze (1985); Gagnidze & al. (1985); Dmitrieva (1990b); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Salix elbursensis* Boiss.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, number of mature individuals, tendency of their decline in numbers, quality of habitat, etc.);

*References used in species assessment:* Shkhian (1973); Sakhokia & Khutzishvili (1975); Gagnidze & al. (1985); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Salix excelsa* S.G. Gmel.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Shkhian (1973); Lachashvili & al. (2007); Lachashvili & Eradze (2017); Shetekauri (2017).

***Salix pentandroides* A.K. Skvortsov**

*References to taxonomy:* The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Shkhian (1973); Sakhokia & Khutzishvili (1975); Gagnidze & al. (1985); Shetekauri (2017).

***Salix triandra* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Shkhian (1973); Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Salix wilhelmsiana* M. Bieb.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Shkhian (1973); Gagnidze & Kemularia-Natadze (1985); Lachashvili & al. (2007); Lachashvili & Eradze (2017).

**SAPINDACEAE (ACERACEAE)*****Acer campestre* L.**

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Lachashvili (1983b); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Shetekauri (2017).

***Acer cappadocicum* Gled. subsp. *cappadocicum* (*A. laetum* C.A. Mey.)**

*References to taxonomy:* Güner (2012); Lachashvili & Eradze (2017); Lachashvili & al. (2021); GBIF.org (2022); IPNI (2022); POWO (2022);

*IUCN red list category and criteria:* LC

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable.

*References used in species assessment:* Lachashvili (1983b); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Shetekauri (2017).

***Acer cappadocicum*** subsp. ***divergens*** (K. Koch ex Pax) A.E.Murray (*A. divergens* K. Koch & Pax)

*References to taxonomy:* Güner (2012); The Plant list (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Lachashvili (1983b).

***Acer hyrcanum*** Fisch. & C.A. Mey

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Lachashvili (1983b); Shetekauri & Chelidze (2016).

***Acer ibericum*** M. Bieb. [*A. monspessulanum* subsp. *ibericum* (M. Bieb. ex Willd.) Yalt.]

*References to taxonomy:* Euro+Med (2006-); Davlianidze & al. (2018); Lachashvili & Eradze (2017); Lachashvili & al. (2021);

*IUCN red list category and criteria:* VU B1 ab (iii, v);

*Assessment argumentation:* extent of occurrence - <20000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, area – fragmented, decline in habitat quality caused by cutting and grazing;

*References used in species assessment:* Lachashvili (1983b); Lachashvili & al. (2007); Goginashvili & Tvauri (2011), (2021); Lachashvili & Eradze (2017).

***Acer platanoides*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Lachashvili (1983b); Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Shetekauri & Chelidze (2016); Shetekauri (2017).

***Acer pseudoplatanus*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of

occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Lachashvili (1983b); Gagnidze & Kemularia-Natadze (1985); Lachahsvili & Mamukelashvili (1986); Dmitrieva (1990a).

***Acer sosnowskyi*** Doluch.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU D2;

*Assessment argumentation:* the species is assessed based on Solomon & al. (2013);

*References used in species assessment:* Lachashvili (1983b); Gagnidze & Kemularia-Natadze (1985); Solomon & al. (2013).

***Acer tataricum*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Lachashvili (1983b); Gagnidze & Kemularia-Natadze (1985).

***Acer trautvetteri*** Medw. [*A. heldreichii* subsp. *trautvetteri* (Medw.) A.E.Murray]

*References to taxonomy:* Euro+Med (2006-); Lachashvili & Eradze (2017); Davlianidze & al. (2018); Lachashvili & al. (2021);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Ketskhoveli (1960); Lachashvili (1983b); Gagnidze & Kemularia-Natadze (1985); Lachahsvili & Mamukelashvili (1986); Dmitrieva (1990a); Kvachakidze (2001); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Acer velutinum*** Boiss.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Lachashvili (1983b); Lachahsvili & Mamukelashvili (1986).

*STAPHYLEACEAE****Staphylea colchica*** Steven

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze 1983d; Gagnidze & Kemularia-Natadze (1985); Dmitrieva (1990a).

***Staphylea pinnata*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze 1983d; Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

*TAMARICACEAE****Tamarix ramosissima*** Ledeb.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Khintibidze 1983; Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Lachashvili & al. (2017).

***Tamarix smyrnensis*** Bunge (*T. hohenackeri* Bunge)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Khintibidze 1983; Gagnidze & Kemularia-Natadze (1985); Lachashvili & al. (2007); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017).

***Tamarix tetrandra*** Pall. ex M. Bieb.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Khintibidze 1983.

#### ULMACEAE

##### ***Celtis australis*** L. subsp. ***australis***

*References to taxonomy:* Euro+Med (2006-); Güner (2012); The Plant List (2013); GBIF.org (2022);

*IUCN red list category and criteria:* DD;

*Assessment argumentation:* data deficient (unknown extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, continuing decline in quality of habitat etc.);

*References used in species assessment:* Shkhian (1975)b; Dmitrieva (1990b).

##### ***Celtis australis*** subsp. ***caucasica*** (Willd.) C.C. Towns. (*C. caucasica* Willd.)

*References to taxonomy:* Euro+Med (2006-); Güner (2012); The Plant List (2013); Lachashvili & al. (2021); GBIF.org (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Shkhian (1975)b; Lachashvili & Mamukelashvili (1986); Lachashvili & al. (2007); Lachashvili & Eradze (2017).

##### ***Celtis planchoniana*** K.I.Chr. (*C. glabrata* Stev. ex Planch.)

*References to taxonomy:* Euro+Med (2006-); Güner (2012); The Plant List (2013); Lachashvili & Eradze (2017); Lachashvili & al. (2021); GBIF.org (2022); WFO (2022);

*IUCN red list category and criteria:* EN B1ab (iii);

*Assessment argumentation:* extent of occurrence - <5000 km<sup>2</sup>, area of occupancy - <5000 km<sup>2</sup>, area – fragmented, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Shkhian (1975)b; Lachashvili & al. (2007); Lachashvili & Eradze (2017).

##### ***Ulmus elliptica*** K. Koch

*References to taxonomy:* The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Shkhian (1975)c; Gagnidze & Kemularia-Natadze (1985); Dmitrieva (1990b); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

***Ulmus glabra*** Huds.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Shkhian (1975)c; Lachashvili & Mamukelashvili (1986); Dmitrieva (1990b); Goginashvili & Tvauri (2011), (2021).

***Ulmus minor*** Mill. (*U. foliacea* Gilib., *U. suberosa* Moench, *U. georgica* Schchian)

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* NT;

*Assessment argumentation:* the species assessment data are approximate to VU category parameters and/or likely to be close to it in the future;

*References used in species assessment:* Shkhian (1975)c; Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990b); Lachashvili & al. (2007); Dolukhanov (2010); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Goginashvili & Tvauri (2011).

***Zelkova carpinifolia*** (Pall.) K. Koch

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* VU B1ab (iii);

*Assessment argumentation:* extent of occurrence - 7000 km<sup>2</sup>, area of occupancy - <2000 km<sup>2</sup>, area – fragmented, decline in habitat quality, caused by cutting and grazing;

*References used in species assessment:* Ketskhoveli (1960); Shkhian (1975)c; Kvachakidze (2021); Lomidze & al. 2020.

**VIBURNACEAE*****Sambucus nigra*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kutateladze (2001); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017).

***Viburnum opulus*** L.

*References to taxonomy:* Euro+Med (2006-); The Plant List (2013); Davlianidze & al. (2018); GBIF.org (2022); IPNI (2022); POWO (2022); WFO (2022);

*IUCN red list category and criteria:* LC;

*Assessment argumentation:* at the current stage, neither the existing nor the expected threats to the species (extent of occurrence, area of occupancy, the number of mature individuals and the tendency of their decline in numbers, etc.) are noticeable;

*References used in species assessment:* Gagnidze & Kemularia-Natadze (1985); Lachashvili & Mamukelashvili (1986); Dmitrieva (1990a); Kutateladze (2001); Shetekauri & Chelidze (2016); Lachashvili & Eradze (2017); Lachashvili & al. (2017); Shetekauri (2017).

## General conclusion

Trees spread in Georgia are presented by 129 species. They belong to 52 genera and 28 families of vascular plants. Six species are presented by two subspecies and 1 species by two varieties.

According to the regional assessment (Georgia) 9 species are critically endangered (CR), 4 taxa - endangered (EN), 9 - vulnerable (VU), and 15 are near threatened (NT). Due to the lack of data, 33 taxa could not be assessed and fell under the category of data deficient. 66 taxa are not endangered at present and have been assigned the category least concern.

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