



# *Alnus barbata* C.A. Mey. *Alnus incana* (L.) Moench.

BETULACEAE

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## Synonyms

*Alnus barbata* C.A. Mey.: *Alnus glutinosa* subsp. *barbata* (C.A. Mey.) Yalt.  
*Alnus incana* (L.) Moench.: *Betula alnus* var. *incana* L.

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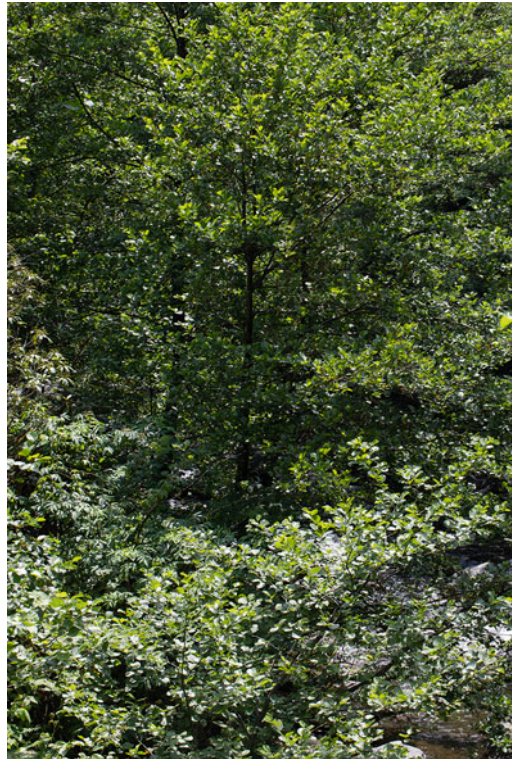
## Local Names

*Alnus barbata*: **Georgian**, თხემლი (tkhemli), თხმელა (thkhmela), მურყანი (murq'ani), ნახო (nakho), რთხმელა (rtkhmela); **Svan**, ზელყაც (belqhats), თხემლა (tkhemla), თხმელა (tkhmela); **Russian**, О́льха (olha); **Azeri**, გызылагач (geiveilagatsh); **Armenian**, ლასენი (lasteni) (Fedorov 1984; Grossheim 1952; Ketskhoveli et al. 1971–2011; Makashvili 1991); **English**, Caucasian alder  
*Alnus incana*: **Georgian**, ნაცარა მურყანი (natsara murq'ani), რთხმელა (rtkhmela); **English**, gray alder

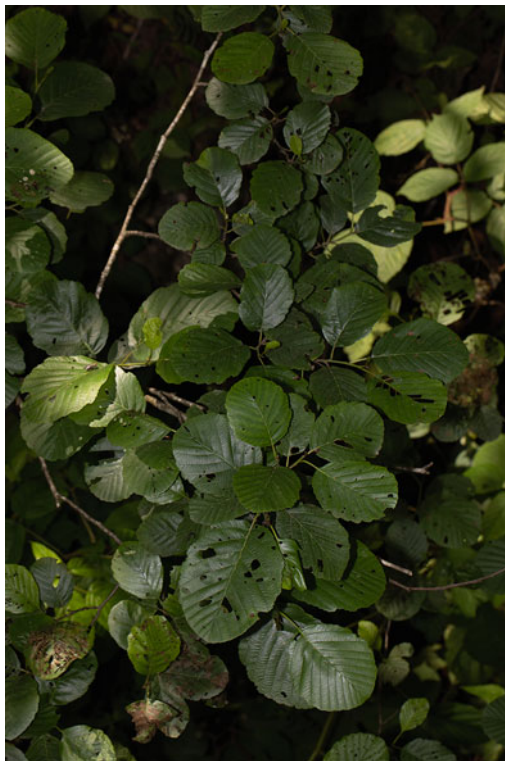
## Botany and Ecology

Trees with oval or obovate-oblong obtuse or acute doubly serrate leaves, with dense yellowish tomentose axillary tufts beneath, both surfaces densely clothed with short hairs; strobiles oblong, 16–20 mm long, 6–8 mm broad, usually as long as or slightly longer than their peduncles. Flowering in April. Caucasus, forms pure and mixed forests on marshy lowlands and along the banks of rivers and water bodies, climbing from valleys to 1500 m (Boborov and Komarov 1936) (Figs. 1, 2, and 3).

**Fig. 1** *Alnus barbata* (Betulaceae) Adjara, Georgia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



**Fig. 2** *Alnus barbata*  
(Betulaceae) Adjara, Georgia.  
(Photo R.W. Bussmann &  
N.Y. Paniagua-Zambrana)



**Fig. 3** *Alnus barbata*  
(Betulaceae) Adjara, Georgia.  
(Photo R.W. Bussmann &  
N.Y. Paniagua-Zambrana)



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## Phytochemistry

Triterpenoids (tarakserol, glutinol, betuline), tannins (Fedorov [1984](#)).

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## Local Medicinal Uses

In the Caucasus *Alnus* is used as diaphoretic, as astringent, for gastrointestinal problems, and for diarrhea (Fedorov 1984).

*Alnus barbata*: The leaves are used for the treatment of wounds (Bussmann et al. 2016a, b, 2018; Bussmann 2017).

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## Local Food Uses

*Alnus barbata*: The leaves are used to make tea (Bussmann et al. 2016a, b, 2018; Bussmann 2017).

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## Local Handicraft and Other Uses

*Alnus barbata*: The fruits and leaves yield black, grayish-yellow, red, and yellow dyes for silk and wool. The leaves and bark are also used for tanning, and the branches for weaving baskets and fences. The wood is very rot resistant and used for constructions in wet areas, e.g., bridges. In early spring the trees produce a lot of pollen. The pollen mixed with sugar and honey can serve as a feed for bees (Fedorov 1984; Grossheim 1952).

The wood is used for construction, especially for posts, as well as for firewood. The inner bark and leaves yield black and brown dyes. The wood is used to make utensils like tool handles and wine presses, and the fruits are applied in veterinary medicine (Bussmann et al. 2016a, b, 2018; Bussmann 2017) (Figs. 4 and 5).

*Alnus incana*: The wood is used in construction and as fuel (Bussmann et al. 2016a, b, 2018; Bussmann 2017).

**Fig. 4** *Alnus barbata* (Betulaceae) young fruits, Khevsureti, Georgia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



**Fig. 5** *Alnus barbata* (Betulaceae) old fruits, Khevsureti, Georgia. (Photo R.W. Bussmann & N.Y. Paniagua-Zambrana)



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