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**NEW DATA ON DISTRIBUTION OF
CAUCASIAN RHODODENDRON
(*RHODODENDRON CAUCASICUM* PALL.)
IN ARMENIA**

New population of *Rhododendron caucasicum* - an endangered species of Armenian flora is found on Pambak mountain range. It is stated to be the largest known population of the species in Pambak mountains. The presence of the species is confirmed at the Mountain Bazumtar (Todor) of Bazum mountain range – for the first time in the 99 years since the first record of *R. caucasicum* in Armenia was made from this location.

Rhododendron caucasicum, subalpine flora of Armenia

Ասատրյան Ա. Թ. Նոր տվյալներ Հայաստանում կովկասյան մրտավարդի (*Rhododendron caucasicum* Pall.) տարածման մասին: Հայտնաբերվել է Հայաստանի ֆլորայի վտանգված տեսակ *Rhododendron caucasicum*-ի նոր պոպուլյացիա Փամբակի լեռնաշղթայում: Այն նկարագրվում է որպես Փամբակի լեռներում տվյալ տեսակի հայտնի պոպուլյացիաներից ամենախոշորը: Առաջին անգամ, 99 տարի անց, հաստատվել է մրտավարդ կովկասյանի առկայությունը Բազումի լեռնաշղթայի Բազումթար (Թոդոր) լեռան վրա՝ Հայաստանում այս տեսակի առաջին գրանցման վայրում:

Rhododendron caucasicum,
Հայաստանի ենթալպյան ֆլորա

Асатрян А.Т. Новые данные по распространению рододендрона кавказского (*Rhododendron caucasicum* Pall.) в Армении. Новая популяция находящегося под угрозой вида флоры Армении *Rhododendron caucasicum* обнаружена на Памбакском хребте. Данная популяция отмечается как самая крупная из всех популяций вида известных с этого хребта. Впервые через 99 лет после первой регистрации рододендрона кавказского в Армении подтверждено присутствие вида в пункте этой находки – на горе Базумтар (Тодор) Базумского хребта.

Rhododendron caucasicum, субальпийская флора Армении

Caucasian rhododendron (*Rhododendron caucasicum* Pall.) is the only rhododendron species found in Armenia and one of the most beautiful representatives of the country's flora. This is up to 50cm tall evergreen shrub, which blooms in late May-June with large (about 5cm in diameter) white or creamy, rarely pinkish flowers gathered in an umbel-shaped raceme. The general distribution area of the species lies within the Caucasus Ecoregion – in the subalpine belt of the Greater and Lesser Caucasus ranges. It is an endangered species of the country's flora (Tamanyan et al., 2010) and its thickets represent a rare and threatened habitat type in Armenia (Asatryan, Fayvush, 2013).

The distribution area of *R. caucasicum* in Armenia is fragmented and encompasses the following mountain ranges in the north of the country: Bazum, Bovaqar (Halab), Pambak, Tsaghkunyants, Javakhq and Gugarats (Mulkijanyan, 1973; Asatryan, 2013). Most of the findings are dated from 1920s to 1950s and majority of the sites have never been visited again since they were discovered. The main obstacle was difficult access to the sites, for which, in addition, no geographical coordinates were available.

In September of 2019 on our joint fieldtrip to Bovaqar mountain range together with Anush Nersesyan and Vasil Ananian due to distant observation with binoculars we noticed a dark green cover at one of the tops of Pambak mountain range, which as we guessed, was a population of *R. caucasicum*. A few weeks later together with Kristina Ananyan we made a trip towards that site and got a confirmation of the presence of quite large population of the target species on place. The site includes some close peaks above village Antarashen with Khorunk as the highest (3044 m above sea level (a.s.l.)).

This is a new location for Caucasian rhododendron as it is not mentioned in any literary source and no herbarium sample is available from there. *R. caucasicum* on Pambak mountain range was found for the first time in 1931 near village Fioletovo. Later, new populations were recorded in the central part of the range near village Margahovit and in about 12 km to the west of it by the top of Maymekh mountain. The last one is the closest location to the newly found population at Antarashen – there is about 4 km distance between them. According to Troitsky (1937) *R. caucasicum* was collected by

N. Sahakyan on 12 Aug of 1936 from the eastern slope of Mt. Maymekh in the pasture of village Shahumyan (former Vartanlu) by the Karpi river head.

Surprisingly, the new found population near Antarashen went unnoticed by the previous researchers, although it is located in a more accessible and visible place. Rhododendron communities at this location are found at altitudes of 2500 - 3040 m a.s.l. in a subalpine meadow as well as on steep rocks and screes on higher altitudes, up to the mountain tops. On the lower elevations, sparse bushes are found in a meadow, while screes and rocks are covered with rather solid thickets or so-called “rhododendron spots”, the largest of which on Khorunk mountain has an area of about 8-10 hectares. Snow on stone runs stays for much longer than in the grassland thus ensuring high humidity and creating comfortable conditions to the rhododendron. According to the locals, in some years, small snow spots remain here up to July-August.

Abramyan (1959) describes four types of rhododendron communities in Armenia, three of which, such as solid thickets, sparse thickets and integrated tickets with various types of grassy vegetation may be seen here. The fourth type – rhododendron thickets integrated with the birch forest are not found at this location. Forest belt in this part of the range is represented with comparatively small fragments with their upper limit at 2250 m a. s. l. The *R. caucasicum*'s communities here are found at about 200 m above the forest. The condition of the population is good, and no threats have been identified. Natural reproduction is sufficient. There were no signs of grazing, since hay meadows are located on the lower altitude where the rhododendrons are not found.

At the same period – in September of 2019 we together with Anush Nersesyan and Vasil Ananian made a remarkable rediscovery of *R. caucasicum*'s population at Mt. Bazumtar (Todor) and nearby areas of the Pushkin pass (Bazum mountain range). This location is known as one of the two close sites on Bazum mountains, where *R. caucasicum* was collected for the first time in Armenia in 1920 by A.B. Shelkovnikov (Troitsky, 1934; Asatryan, 2013) and since then we were the first researchers who confirmed the presence of the species there. Rhododendron at this location occurs with comparatively large “spots” in the meadows on the slopes of the north and north-eastern exposition – at about 150-

200 m above the forest belt and up to the top of Mt. Bazumtar at 2796 m a.s.l. The lowest locality of the rhododendron we recorded on the Pushkin pass was at 2243 m a.s.l. The herbarium specimens collected from the described locations are stored in the herbarium of the Institute of Botany after A. Takhtajyan, National Academy of Sciences of Armenia (“Pambak mountain range, above vill. Antarashen, at 2560 m a.s.l., 13.10.2019, leg. A. Asatryan, K. Ananyan, det. A. Asatryan” ERE 197927, 197928; “Bazum mountain range, Pushkin Pass, at Bazumtar (Todor) peak, 2600 m a.s.l., 21.09.2019, leg. A. Asatryan, A. Nersesyan, V. Ananian, det. A. Asatryan”, ERE 1980017).

The new data on *R. caucasicum* given above may be used in further conservation planning and monitoring of the species and its' habitats and will support the reassessment of its status for the upcoming new edition of the Red Data book of Armenia.

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1 – Population of the *Caucasian rhododendron* on Pushkin Pass, at Mt. Bazumtar.



2 – *R. caucasicum* at the new location on Pambak mountain range.