

New Records of Dalmatian *Algyroides* (*Algyroides nigropunctatus*, DUMERIL and BIBRON, 1839) (Lacertidae) in Montenegro with Comment on its Conservation Status

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Abstract: Dalmatian *Algyroides* (*Algyroides nigropunctatus*, DUMERIL and BIBRON, 1839) is a Balkan subendemic lacertid lizard with strong dependence on the Mediterranean climatic conditions. Its distribution area is restricted to the coastal zone and the islands of the Eastern Adriatic and in the Western part of Ionian Sea. Relatively few data of Dalmatian *Algyroides* were known for the territory of Serbia and Montenegro. This species was found relatively deep inlands in the valleys, canyons and gorges of the Eastern Adriatic tributaries in Montenegro, as well as in Metohia (Serbia). In this paper, we present more precise insight into the distributional pattern of this species in Montenegro. Conservation status of this species in Serbia and Montenegro is also proposed.

Key words: Dalmatian *Algyroides*, subendemic lizard, *Algyroides nigropunctatus*, distribution, Serbia and Montenegro, conservation status

The distributions of amphibian and reptile species on the Balkan Peninsula have very diverse patterns, due to the complex position of mountain ranges and river flows. The mosaic distribution of vegetation communities in the area, connected or not with the hospitable climatic corridors provides conditions for somewhat unexpected occurrence of many members of Mediterranean herpetofauna deeply in the continent.

Dalmatian *Algyroides* (*Algyroides nigropunctatus*, DUMERIL and BIBRON, 1839) is a Balkan subendemic lacertid lizard with strong dependence on the Mediterranean climatic conditions. Its distribution area is restricted to the coastal zone and the islands of the Eastern Adriatic and in the Western part of Ionian Sea (ARNOLD 2002, CHONDROPOULOS 1983, 1997). This species was also found relatively deep inlands in the valleys, canyons and gorges of the Eastern Adriatic tributaries (reviewed in DŽUKIĆ 1970, DŽUKIĆ and PASULJEVIĆ 1979).

Relatively few data on Dalmatian *Algyroides* were known for the territory of Serbia and Montenegro. Among them, four are situated in the Mediterranean part of

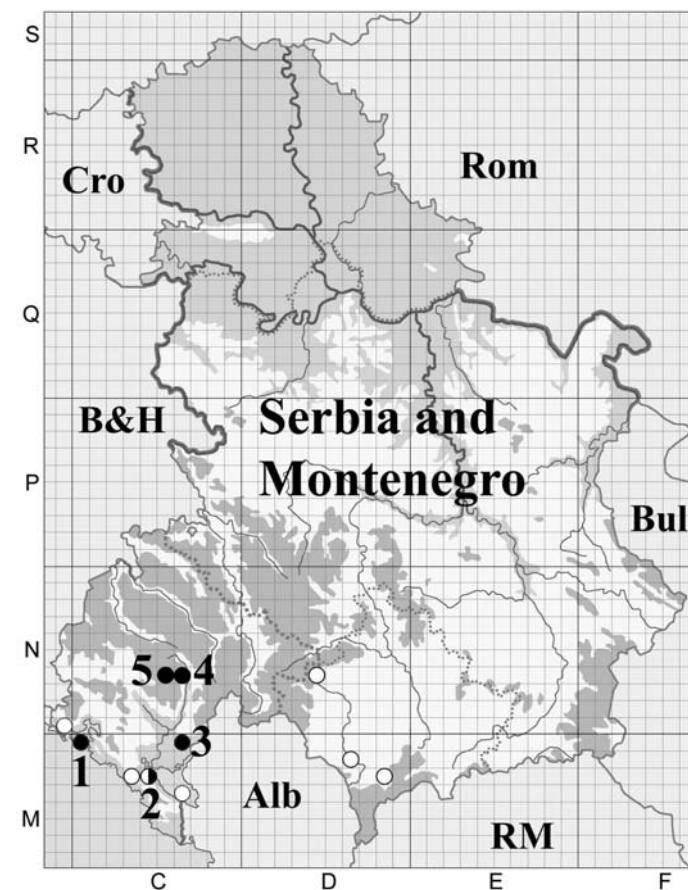


Fig. 1. New localities (solid circles) of Dalmatian *Algyroides* (*Algyroides nigropunctatus*) in Montenegro (CM 09, CM 47, CM 69, CN 63, CN 53/63) National UTM grid 10 x 10 km Reference). Published records (open circles).

Montenegro - restricted on the slopes of the Orjen Mountain (BOLKAY 1924), Crmnica and some islands in the region of Skadar Lake (DŽUKIĆ 1970, DŽUKIĆ and PASULJEVIĆ 1979, Crnobrnja-Isailović and DŽUKIĆ 1995, BEJAKOVIĆ *et al.* 1996). Dalmatian *Algyroides* is also discovered in Metohia in Southwestern Serbia (DŽUKIĆ 1970, DŽUKIĆ and PASULJEVIĆ 1979). The new records presented here give more precise insight into the distributional pattern of this species in Montenegro.

Luštica Peninsula in the Boka Kotorska Bay, with the highest elevation of 585 m a. s. l., was assigned as a new founding place of Dalmatian *Algyroides* (Fig. 1, record 1), after tourists caught one male in September 1987 in the surroundings of Krašići village (UTM 10 x 10 km CM 09).

Except old records concerning the western slopes of the Orjen Mountain (BOLKAY 1924), other published data of *A. nigropunctatus* occurrence in Montenegro point on restricted area near the western bank of Lake Skadar - Crmnica (Virpazar, Brčela, see in: DŽUKIĆ and PASULJEVIĆ 1979) and some of the islands situated along the foothills of the Rumija Mountain (BEJAKOVIĆ *et al.* 1996).

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The continental distributional gap between Crmnica and the Albanian localities was diminished after the discovery of new local population about 5 km straight from Virpazar to the east. On 21st May 1994 we noticed female and male in the small gorge between the villages of Godinje and Gornja Seoca (UTM CM 47 - Fig. 1, record 2). They were observed at 01 p.m., while foraging around the large, sunny stones near the footpath, some 20m above a tiny water flow running through the gorge. The relatively steep slopes were covered with dense vegetation.

About 23 km straight north we discovered another new locality on 29th May 1996. An adult female was caught at 02 p.m. near a dry riverbed at the western foothills of Dečić hill, in the vicinity of Tuzi town (UTM CM 69 - Fig. 1, record 3). The terrain was partially covered with shrubs and small trees, with indication of sporadic occurrence of water flow.

Finally, on 29th July 2000, during the field trip along the Morača River Canyon we found a female specimen of Dalmatian *Algyroides* at about 300m a. s. l. (Fig. 1, record 4). The site of finding is situated at the left bank of the Morača River (UTM CN 63). A specimen was recorded in late evening at the dry, rocky habitat of southeastern exposition, covered with bushy vegetation. Next year, on 27th July 2001, we found Dalmatian *Algyroides* (one female specimen) in the Mrtvica River Canyon (right tributary of Morača River), to the southwest from the first record. The site of finding is situated on the left bank of the Mrtvica River, down from Mrtvo Duboko village (UTM CN 53-63 - Figure 1, record 5), at 400 - 600 m a. s. l. and southwestern exposition. This record shifts the northern border of the distribution area in Montenegro additionally 60 km into the mainland. Also, the record from the Morača River (42°45'32'' latitude; 19°24'58'' longitude) is situated north to the previously assigned northernmost locality of this species in Serbia and Montenegro (spring of Beli Drim River, in Metohia - 42°44'21'' latitude; 20°18'38'' longitude; see Fig. 1) (Džukić and Pasuljević, 1979).

The records from the Morača River and its tributary are not surprising, because the influences of the Mediterranean climate spread through this and other canyons deep into the continental part of Montenegro (Džukić 1991, Tomović *et al.*, 2001). The refuge character of the the Morača River Canyon has general influence on the distribution and the presence of relict vascular flora and fauna on this territory (Lakušić 1972, Lakušić *et al.* 1989). The records from Tuzi and the Mrtvica River suggest that the distributional gap between the population of Morača River Canyon and the southern ones could not be complete. Despite the general inhospitable climatic characteristics of this species in the northern part of Skadar Lake valley (mostly open ground, with scarce vegetation and prolonged drought during the year) the new records argue that Dalmatian *Algyroides* could be distributed along the Morača River and its tributaries. Local populations are often found in degraded shrub, bushes between fields and rocky cliff areas near water (Bejaković *et al.* 1996) - generally in habitats (or its remnants), which provide appropriate conditions of insolation, shade and moisture.

Additional discoveries of *A. nigropunctatus* local populations in the broad area of the Skadar Lake region are expected, according to the diversity of relief and vegetation communities (CRNOBRNJA-ISAILOVIĆ and DŽUKIĆ 1995). Also, the recent finding of Mediterranean herpetological elements in the continental part of Montenegro (TOMOVIĆ *et al.* 2001) points, that more detailed investigations could additionally change the established contours of species area.

A. nigropunctatus is protected by national legislations both in Montenegro and

Serbia (DŽUKIĆ 1995). The patchy distribution of finding sites suggests that special care should be taken to maintain the genetic variability in local populations as well as to preserve its habitats.

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Нови сведения за далматинският алгируидес
(*Algyroides nigropunctatus*, DUMERIL and VIBRON, 1839)
(*Lacertidae*) в Черна гора с коментар за неговия
консервационен статус

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(Резюме)

Далматинският алгируидес (*Algyroides nigropunctatus*, DUMERIL and VIBRON, 1839) е балкански субендемичен гуцер от семейство *Lacertidae* със силна зависимост от средиземноморските климатични условия. Районът на неговото разпространение е ограничен в крайбрежната зона и на островите в източната част на Адриатическо и в западната част на Йонийско море. На територията на Сърбия и Черна гора са известни малко сведения за този вид. Той е откриван в сравнително дълбоки долини, каньони и дефилета около източните притоци на Адриатическо море в Черна гора, както и в Метохия (Сърбия).

В тази статия представяме по-прецизен поглед върху модела на разпространение на този вид в Черна гора. Предлага се и консервационен статус на този вид в Сърбия и Черна гора.