

A NEW LACERTID SPECIES IN TRANSYLVANIAN HERPETOFAUNA:

Lacerta praticola pontica Lantz & Cyrén 1919

IOAN GHIRA

The study of Transylvanian herpetofauna started in 1823, by E. Frivaldsky publication entitled „Monographia Serpentum Hungariae”, afterward Bielez in 1856 and then in 1888 drawn up an almost complete list of amphibians and reptiles from this region. Only 4 lacertid species (*L. viridis*, *L. agilis*, *L. muralis* and *L. vivipara*) were recognized to be part of Transylvanian herpetofauna. In 1919 Lantz and Cyrén describe a new species: *Lacerta praticola pontica* having terra typica in Gagri, West Caucasus. In 1943, Fékerváry-Lángh publishes in „Fragmenta Faunistica Hungarica”, a new herpetofaunistic catalogue where he names a fifth lacertid species (*Lacerta praticola*) found in the proximity of Transylvania, in Nădrag locality, situated in S-W of the Poiana Ruscă Mountains.

The further research concerning Transylvanian herpetofauna made by Fuhn, Vancea, Stugren and Popovici did not bring new data about this species, considering the locality Nădrag as the northeast point of his spreading areal.

In april 1994, it was collected an adult male of meadow lizard (*Lacerta praticola pontica*), in the proximity of Deva, in a mixed forest (*Quercus* sp. + *Carpinus betulus* + *Fraxinus ornus*), on the southern side of an andesite hill, where a small population of *Vipera ammodytes ammodytes* occurs, in glades and rock-piles.

Usually, the meadow lizard prefers rather moist places with lush vegetation such as glades in woods, stream-banks, marsh-edges, damp meadows in mountain areas. Also occasionally it is found on well vegetated stony slopes. Often uses to bask on old tree trunks, isolated stones etc. (Arnold & Burton)

In Romania, in only 13 places was recorded up to day. These localities may be divided in 2 zones: a) in the neighbourhood of Bucharest and b) in the S-W of the country (Almăj and Locvei Mountains, Timiș Passage and Mehedinți Mountains). Only the Nădrag locality is isolated, being at 80 km northern than the limit of b) zone (Map. 1)

Our specimen is an adult male with the following biometric data: $L=47.0$; $CD=88.0$; $L.c.=11.5$; $L.t.c.=8.0$; $I.c.=6.0$; $P.a.=15.0$; $P.p.=21.0$; $CD/L=1.87$; $L.c./L=0.24$; $P.a./L=0.31$ and $P.p./L=0.44$. These data and the pholidosis too, are similar to the diagnosis given by Fuhn and Vancea in „Fauna R.P.R.”.

Discussions and Conclusions

Concerning the presence of the meadow lizard, *Lacerta praticola pontica* in the N-E of the Poiana Ruscă Mountains, it can be submit two hypothesis (map. 1):

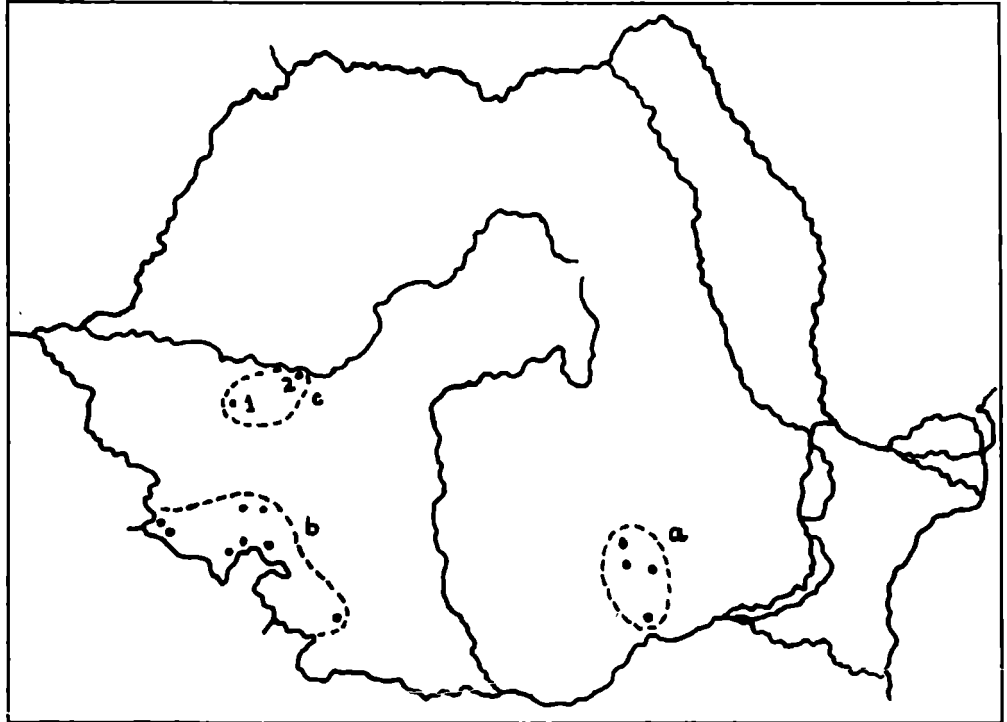


Fig. 1

1. This species is in expansion, widening his areal. Arguments: the straight distance between Nădrag and Deva is only 60 km, and the migration would be possible both by the north and the south and then east sides of Poiana Ruscă Mountains. More than 50% of these mountains are afforested, and the climatic conditions being favourable, the migration is possible.

2. The Poiana Ruscă Mountains were insufficient studied in herpetological point of view. Arguments: a comparative analysis between the zone b) and the zone c) (the Poiana Ruscă Mountains-depressionary regions) shows the similarity between them, climatic speaking: the annually mean temperatures are between 9° and 11° C, and the annually rainfall are situated between 600 and 800 mm. Also, the forest vegetation is made by the same associations (**Fagus silvatica** + **Carpinus betulus**; **Quercus petraea** + **Carpinus betulus**; **Quercus petraea** + **Fraxinus ornus** + **Cornus mas**). In Poiana Ruscă Mountains the top localities for the summer rainfall are Deva (200 mm), Nădrag (140-170 mm) and Lelese (120-140 mm). It is not by chance that the meadow lizard, being a rather damp preferring species, chose two of these three localities (we didn't yet looked for it in the third locality).

In conclusions, we share the hypothesis that it is not an extension of the areal of this species but the maintenance of some relict populations, in favourable biotops.

Map 1: The spreading areal of the meadow lizard (*Lacerta praticola pontica*) in Romania, with the zones: a) in the neighbourhood of Bucharest; b) in the S-W of the country (Almăj and Locvei Mt., Timiș Passage and Mehedinți Mt.) ; c) in Poiana Ruscă Mt. with 1. Nădrag and 2. Deva.

Harta 1: Arealul șopârlei de pădure (*Lacerta praticola pontica*) în România, cu zonele: a) în vecinătatea Bucureștiului; b) în S-V țării (M-ții Almăjului și Locvei, Culoarul Timiș și Munții Mehedinți); c) în Munții Poiana Ruscă: 1. Nădrag și 2. Deva.

REZUMAT

Lucrarea prezintă un exemplar mascul adult de *Lacerta praticola pontica*, colectat de noi în împrejurimile municipiului Deva, prima semnalare a acestei specii în Transilvania. După ce sunt arătate condițiile de mediu specifice acestei șopârle și caracteristicile biometrice ale individului colectat, sunt emise 2 ipoteze legate de prezența acestei specii în extremitatea nord-estică a Munților Poiana Ruscă: 1) specia se află în expansiune, extinzându-și arealul 2) Munții Poiana Ruscă nu au fost suficient cercetați din punct de vedere herpetologic, până în prezent. După ce sunt trecute în revistă argumentele pentru fiecare din cele două ipoteze, concluzia care se conturează susține existența unei populații relict, în biotopuri prielnice existenței lor.

REFERENCES

- ARNOLD, E. N. and BURTON, J., A., 1978, *A Field Guide to the Amphibians and Reptiles of Britain and Europe*, Collins Ed, St James Place, London
- BIELZ, E., A., 1888, *Die fauna der Wirbeltiere Siebenbürgens nach ihren jetzigen Bestände*. Verh. Mitt. Siebenb. Ver. Hermannstadt 38:15-20
- FEJERVARY-LANGH, A., M., 1943, *Beiträge und Berichtigungen zum Reptilien Teil des Ungarischen Faunenataloges*. Fragm. Faun. Hungar., 6(3) :81-98.
- FUHN, I., E. și VANCEA St., 1961, *Fauna R.P.R.*, vol. XIV, fasc. 2 Reptilia, Ed. Academiei R.P.R., București
- KRÄUTNER, H., G., 1984, *Munții Poiana Ruscă-Ghid Turistic*, Ed. Sport-Turism București
- STUGREN, B., 1961, *Systematic der Weiseneidechse Lacerta praticola Eversmann*, Zool. Beitr. 6(3):379-391
- STUGREN, B., și POPOVICI, N., 1961, *Note faunistice herpetologice din R.P.R.*, II, Acad. R.P.R., Stud și Cercet biol.
- STRUGREN, B., 1986, *Postglacial Ages and the Herpetofauna of Romania in Studies in Herpetology*, Roček, Z. (ed), Prague, pp. 93-96
- XXX- *Geografia României, 1987, vol.III, Carpații Românești și Depresiunea Transilvaniei*, Ed. Acad. R.S. România, București.

Ioan Ghira
Muzeul județean Deva