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A new passeriform bird from the Middle Miocene of Subpiatră (W-Romania)

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Abstract. Up to present the Middle Miocene locality of Subpiatră 2/1R, western Romania, have yielded at least 13 different bird taxa collectively representing six orders and eleven families. Due to the fragmentary state of most specimens only three species we identified below familial level: *Proardeola walkeri, Anas albae* and *Palaeortyx gallica*. A more detailed study of a distal humeral fragment from the Subpiatră 2/1R locality, assigned previously to Muscicapidae gen. et sp. indet., revealed that it belongs to *Luscinia jurcsaki* n. sp. a new passeriform bird, which differs from its congeners in its larger size and details of distal humeral morphology.

Introduction

The locality of Subpiatră 2 (Bihor County, western Romania) is situated near the town of Aleșd, about 40 km east to Oradea. The fossil locality was identified in the summer of 2004 during a geological survey downward the Rece Creek (a tributary brook of Crișul Repede river) near the village of Subpiatră. The deposit consists of sandy clays and silts, interbedded into clay and calcareous clay layers (Venczel et al. 2005). Up to present the list of vertebrates includes

indeterminate fishes, lissamphibians (*Triturus* sp., *Latonia gigantea*, *Rana* sp.), reptiles (*Diplocynodon* sp., *Ophisaurus* sp., *Lacerta* sp., Varanidae indet., Colubrinae indet., *Vipera* sp.), birds, rodents (*Eurolagus fontannesi*, *Muscardinus sansaniensis*, *Myoglis meini, Megacricetodon* sp., *Democricetodon brevis*) and indeterminate insectivores. The age of the fossil assemblage, based on key rodent taxa, is late Badenian (MN 6) (Hír & Venczel 2005, Kessler & Venczel 2009).

In the present paper we describe a new passeriform bird found at the Miocene site of Subpiatră 2/1R in Bihor County. Previously this specimen, preserving a distal humerus, was listed as Muscicapidae gen.,et sp.indet. (Kessler & Venczel 2009). The fossil described here belongs to the paleontological collection of the Ţării Crişurilor Museum in Oradea, Romania.

Institutional abbreviations: **MTM**, Hungarian Natural History Museum, Budapest, Hungary; **MTC**, Ţării Crișurilor Museum, Oradea, Romania.

Systematic Palaeontology

Aves
Ord. Passeriformes (Linnaeus), 1758
Fam. Muscicapidae Vigors, 1825
Luscinia Forster, 1817

Luscinia jurcsaki sp. n.
(Fig.1 A, B)

Type locality and age: Subpiatra 2/1R, Middle Miocene (MN6).

Holotype: MTC. No. 24460. Left distal humeral fragment.
Measurement: F (= breadth of the distal epiphysis) = 4,48 mm.
Comparative material: Luscinia luscinia (MTM n=1; F= 4,26 mm); *L. megarhynchos* (MTM n=1; F= 4,05 mm).

Diagnosis: An extinct large-sized nightingale species. The holotype is reminiscent of the flycatchers (Muscicapidae). Within this family it is larger than those of *Muscicapa, Saxicola, Erithacus* and *Phoenicurus*, but it is significantly smaller than those of *Oenanthe* and *Monticola*. In lateral view, the *condylus ventralis* is more prominent than those of *Saxicola* and *Oenanthe*. The *processus supracondylaris*

dorsalis is not forked like in the genus *Monticola*.
Derivation of name. After Jurcsák Tibor, a former paleontologist at Țării Crișurilor Museum, Oradea.

*Description of the holotype.*In cranial view, the *epicondylus ventralis* extends onto the distal humeral epiphysis as a moderately prominent line (Fig.1A: a); the *processus flexorius* (Fig.1A: b) is rounded and abutting distally. In lateral view, the *condylus ventralis* (Fig.1A: c) is well-defined and of oval shape; the *incisura intercondylaris* (Fig.1A: d) forms a deep and wide-acutangular fossa. The *condylus dorsalis* (Fig.1A: e) is straight-oval and rounded distally; the *epicondylus dorsalis* (Fig.1A: f) is damaged; albeit somewhat damaged, the *processus supracondylaris dorsalis* (Fig.1A: g) is well-defined and uniramose.

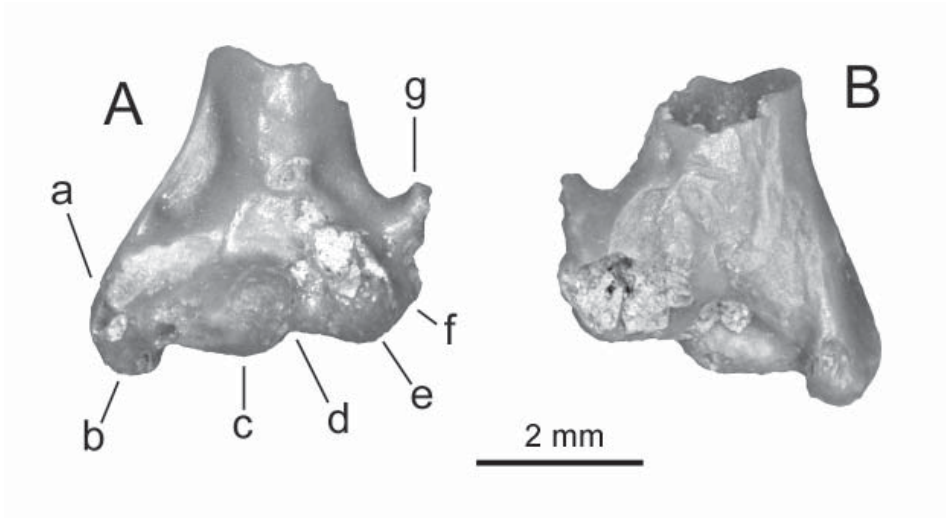

Figure 1. Holotype of *Luscinia jurcsaki* n.sp. A: distal humeral epiphysis in cranial view. a – *epicondylus ventralis*, b – *processus flexorius*, c – *condylus ventralis*, d – *incisura intercondylaris*, e – *condylus dorsalis*, f – *epicondylus dorsalis*, g – *processus supracondylaris dorsalis*. B: distal humeral epiphysis in caudal view.

Distribution: In the Carpathian basin the FAD (= First Appearance Date) of the genus *Luscinia* is known from the late early Miocene (MN 5) of the Litke 2 vertebrate locality in northern Hungary (Kessler & Hír, in press.). The holotype of *Luscinia praeluscinia* Kessler & Hír, 2011 is represented by a coracoid. *Luscinia janossyi* Kessler, 2011 is another extinct species, known from the late Miocene (MN 13)

of Polgárdi 4, Hungary. The holotype of this taxon is based on a distal humeral fragment. The latter is significantly smaller than that known from Subpiatră (F= 3.92 mm) and, like in the case of *L. praeluscinia* from Litke, its size is more close to Recent *Luscinia luscinia*. Outside the Carpathian basin the genus (*L. svecica*) is known from the late Pliocene (MN 16) of Rebielice 1 (Jánossy 1974) and from the Quaternary (Q1) of Stránska Skála, Czech Republic (Jánossy 1972).

The FAD of Recent species are known starting from the Quaternary. The available occurrences from the Carpathian basin are listed below, as follows:

Luscinia luscinia (Linnaeus), 1758
Q1: Betfia 9 (W-Romania), (Gál 2002);

Luscinia megarhynchos C. L. Brehm, 1831
Q1: Betfia 9 (W-Romania), (Gál 2002); **Q4/II:** Bodajk–Rigólyuk (Hungary), (Kordos 1984);

Luscinia janossyi Kessler, 2011
MN 13: Polgárdi 4 (Hungary), (Jánossy 1991, 1995);

Luscinia sp.
Q1: Deutsch–Altenburg 4B, Austria) (Jánossy 1981). After Mlíkovský (1998) this taxon may have belonged to *Sylvia atricapilla*.

The nightingales are small to medium sized passeriform birds. Typically, their main food consists from insects. Actually they are migratory-birds. Their presence in the fossil material indicates scrubs and forests.

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