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安徽潜山晚古新世鼩鼱目（哺乳纲）一新属[1)]

黄学诗 郑家坚
（中国科学院古脊椎动物与古人类研究所 北京 100044）

摘要 记述了在安徽省潜山盆地晚古新世地层中发现的鼩鼱类的一个新属新种——李氏皖掠兽（*Wanolestes lii* gen.et sp. nov.）。新属以 p4 臼齿化程度低，下颊齿跟座脊状，仅具两个下臼齿为其特点。

关键词 安徽潜山，晚古新世，鼩鼱类
中图法分类号 Q915.873

在安徽潜山盆地，以往曾发现过鼩鼱目微翼齿兽科（Micropternodontidae）的 *Hyracolestes* 化石（邱占祥等，1977），本文记述的标本有可能也属于这个科，但它在形态上与过去发现在潜山和其他地区的同类化石均有很大区别，是一新属新种，故予以简单记述。

鼩鼱目 Soricomorpha Gregory, 1910
？微翼齿兽科 ？Micropternodontidae Stirton et Rensberger, 1964
皖掠兽属 *Wanolestes* gen. nov.

属型种 李氏皖掠兽（*Wanolestes lii* sp. nov.）。
包括种 仅一属型种。
特征 同属型种。
词义 皖，化石所在地安徽省简称；掠兽，意为强盗、海盗，通常用来指食虫性动物。

李氏皖掠兽（新属新种） *Wanolestes lii* gen. et sp. nov.
（图1,2）

正型标本 一对不完整的下颌骨，左侧保存 p3～m2，及 p2 的后齿根；右侧保存 p3 和 m2，及 p4 的齿槽、m1 的齿根和 p2 的后齿槽（V 12685）。
产地与层位 安徽省潜山县痘姆乡杨小屋，晚古新世痘姆组。
特征 一种大小与 *Hyracolestes* 相近、同具两个下臼齿的鼩鼱类动物，但它的 p4 臼齿化程度低、下颊齿跟座窄长呈脊形。
词义 种名赠给我国著名的地质古生物学家李传夔教授。
描述 下颌水平支浅，底缘比较平直，内侧平而外侧浑圆。p4 和 m2 三角座之下颌骨体唇侧面深分别为 1.5 和 1.4mm。颏孔稍呈圆形，直径约为 0.7mm，位于 p3 之下骨体中

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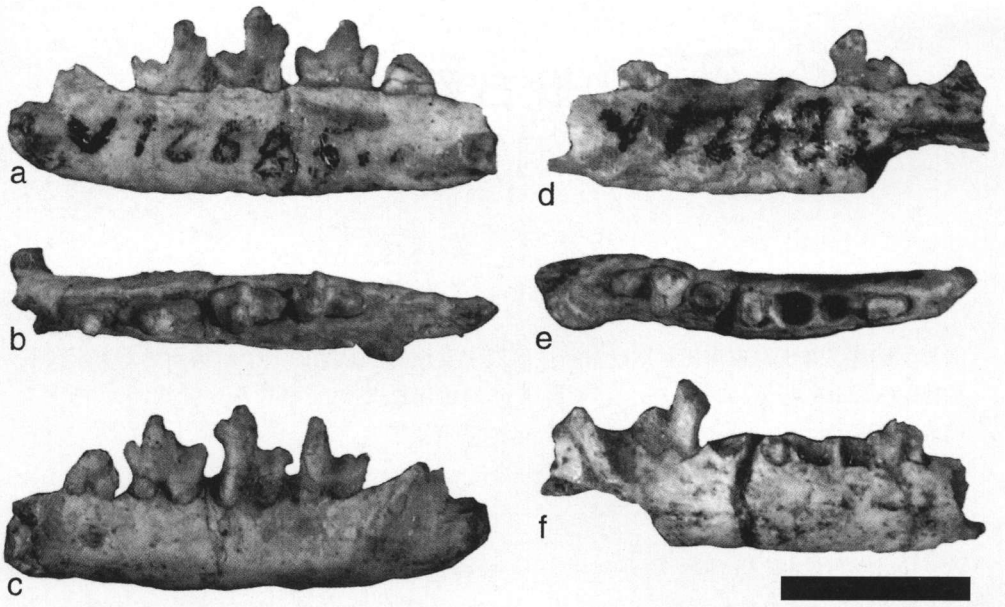

图1 李氏皖掠兽(新属新种)的下颌骨(V 12685)

Fig.1 Lower jaw (V 12685) of *Wanolestes lii* gen. et sp. nov.

a～c,左下颌骨 left lower jaw with p3～m2 a,舌面观 lingual view; b,冠面观 crown view; c,唇面观 labial view; d～f,右下颌骨 right lower jaw with p3 and m2 d,舌面观 lingual view; e,冠面观 crown view; f,唇面观 labial view

标尺 scale bar = 5mm

部。下颌联合部后缘达 p2 后缘。上升支起于 m2 之后,从侧面看并不遮盖该牙齿。咬肌窝深,咬肌脊发达,前缘达 m2 之后缘。下颌角突较圆凸。

下颊齿跟座均明显窄于三角座。

p3 小,与前面 p2 的齿槽约有 0.6mm 的距离,表明之间可能有小的齿隙。p3 冠面纹饰简单,下原尖高大,下前尖和下后跟尖呈萌芽状,不太明显。p4 粗看象放大了的 p3,但其下前尖低而明显,位于下原尖前方略偏内,与下原尖之间有明显的缺口。下后尖极小而不明显,似瘤状突起,呈初始状态似偎依在下原尖的后内侧。跟座上只有一个尖,大,似下臼齿的下次尖或下次小尖。m1 有发育完善的三角座,略横宽。下原尖高大,下后尖次之,下前尖最低小。下后脊比较横向,与下前脊间夹角约为 60°。跟座不呈盆形,和 p4 一样,有点呈脊状。但内侧比外侧略凹,这样跟座上较大的尖极可能为下次尖,比较纵向的脊为下斜脊,它连于三角座后壁中部。下次尖之后的小尖从位置上看可能是下次小尖,这样跟座上就不存在下内尖。m2 比 m1 稍小(表 1),更显细长。三角座是稍微缩小的 m1 三角座。与 m1 一样,跟座上有两个前后向排列的尖,但不同在于下次小尖比下次尖高。

比较和讨论 本文记述的标本下前臼齿为尖形齿,下臼齿三角座高而剪切,m2 跟座细长,只有两个下臼齿,与亚洲发现的 *Sarcodon* 和 *Hyracolestes* 相似。这两属与 *Deltatheridium* 一起曾被 Szalay 和 McKenna (1971) 放在同一科——Deltatheridiidae 中。事实上

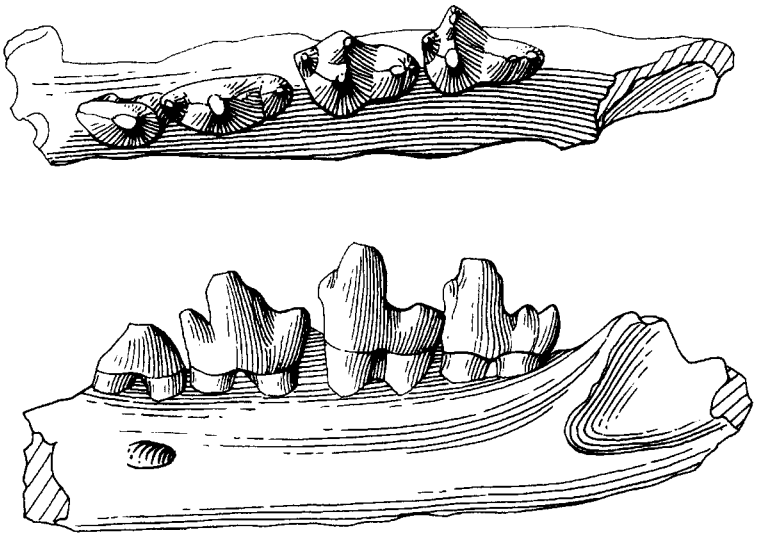

图2　李氏皖掠兽(新属新种)的左下颌骨(V 12685)
上,冠面观;下,唇面观
Fig.2　Left lower jaw with p3 ~ m2 (V 12685) of *Wanolestes liigen*. et sp. nov.
Upper, crown view; Lower, labial view

*Deltatheridium*是亚洲晚白垩世动物,它与 *Deltatheroides* 一样,都具有 m4,只是前者的 m4 三角座上无下后尖而已,加上鼻骨的某些相似性,所以有人怀疑它可能是有袋类(Kielan-Jaworowska, 1975)。*Sarcodon* 的前臼齿不压缩,之间有齿隙(可能吻部长,有点像 *Miacids*),m1 跟座有下内尖。*Hyracolestes* m1 跟座虽无下内尖,但它的下臼齿与 *Sarcodon* 一样,跟座多少有点呈盆形(Matthew and Granger, 1925; Meng et al., 1998;邱占祥等,1977)。而且这两个属的 p4 臼齿化程度都很高,形态上有点像臼齿,与 p4 臼齿化程度低、下臼齿跟座不呈盆形的新属有很大区别。后来,McKenna 等(1984)将 *Sarcodon* 移出 Deltatheridiidae 科,与他们新建的 *Prosarcodon* 以及 *Sinosinopa*(Qi, 1987)一起放入鬶鼽类的 Micropternodontidae 科中。*Prosarcodon* 是早中古新世的属种,虽然也具两个下臼齿,但它的 p4 臼齿化程度仍很高,下后尖虽不像在臼齿中那样与下原尖相距较远,但已明显分化。下臼齿跟座呈盆形,下次尖、下内尖和下次小尖均很发育,而且它的下颊齿的三角座比跟座明显地高,这些都与新属有很大差别。在内蒙古中始新世阿山头动物群中发现的 *Sinosinopa* 以其具有 3 个下臼齿不同于皖掠兽。这个科按照 McKenna and Bell (1997)的分类,还包含有 *Micropternodus*, *Clinopternodus*, *Jarveia* 和 *Carnilestes*。前两属是北美晚始新世及其以后的晚期种类,具有 3 个下臼齿,*Micropternodus* 的 p4 臼齿化程度也很高,而且三角座上的下原尖尤其高得突出(Matthew, 1903),难以与新属相比。发现在哈萨克斯坦的 *Jarveia*,虽与新属是同时代的动物,但它具有 3 个下臼齿,而且具宽的盆形跟座(Nessov, 1987)。*Carnilestes* 是我国

古新世的属种，同样也只具两个下臼齿，但它的下臼齿跟座呈盆形，其上的3个尖明显(Wang and Zhai, 1995)，潜山的下臼齿跟座不呈盆形，无下内尖，无法归入该属。

表1 李氏皖掠兽的下颊齿(V 12685)测量与比较

Table 1 Measurements and comparison of the lower cheek teeth (V 12685) of *Wanolestes lii* gen. et sp. nov. (mm)

	p3		p4			m1			m2		
	L	PW	L	AW	PW	L	AW	PW	L	AW	PW
Wanolestes lii (V 12685)	1.50	0.80	2.25	1.00	0.90	2.25	1.35	0.90	2.10	1.30	0.75
Hyracolestes ermineus (V 4327)[1)]	1.60	0.70	2.10	1.30		2.30	1.30				
Hyracolestes ermineus (AMNH No. 20425)[2)]	1.80	0.95	2.35	1.30	1.35	2.40	1.35	1.20			
Hyracolestes sp. cf. *H. ermineus* (V 11136)[3)]	1.53	0.75	2.04	1.20		2.01	1.30				
Sarcodon pygmaeus (AMNH No. 21732)[2)]			2.70	1.55		2.85	1.70	1.50			
Prosarcodon lonanensis (WNUG no. 78Sh001)[4)]	1.55		2.57	1.46	1.18	2.18	1.70	1.27	2.74	1.74	1.19

1) 依邱占祥等，1977；2) 依 Szalay and McKenna, 1971；3) 依 Meng et al., 1998；4) 依 McKenna et al., 1984。

在亚洲还有些类群，如对锥齿兽类(didymoconids)，也只具两个下臼齿，晚期种类也有的像中兽(mesonychids)那样不具盆形跟座，但它们的下臼齿、甚至p4的下后尖与下原尖同等发育，成双作对，与我们的标本下后尖不如下原尖高大显然是两个式样。而且早期种类下臼齿的跟座仍呈盆形(郑家坚，1979)。因此，本文记述的材料应是一新属，命名为皖掠兽。它的分类位置一时难以确定，暂将其放在鲎鳚目微翼齿兽科中。

致谢 文中插图由杨明婉高级工程师绘制。

A NEW GENUS OF SORICOMORPHA (MAMMALIA) FROM THE LATE PALEOCENE OF QIANSHAN BASIN, ANHUI PROVINCE

HUANG Xue-Shi ZHENG Jia-Jian

(*Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences* Beijing 100044)

Key words Qianshan, Anhui, Late Paleocene, Soricomorpha

Summary

Hyracolestes fossil of Micropternodontidae was found in Qianshan Basin in the past (Qiu and Li, 1977). The new material here described from the same basin may belong to the same family but differs from taxa within the family found both in this basin and other regions.

Soricomorpha Gregory, 1910

? Micropternodontidae Stirton et Rensberger, 1964

Wanolestes lii gen. et sp. nov.

(Fig.1, 2)

Type A pair of lower jaws: left with p3 ~ m2, and posterior part of p2; right with p3 and m2, and alveoli of p4, roots of m1 and posterior alveolus of p2 (V 12685).

Lacality and horizon Youngxiaowo, Doumu Town, Qianshan County, Anhui Province; Late Paleocene Doumu Formation.

Diagnosis A genus resembles *Hyracolestes* in size, main tooth morphology, and lower molar number, but differs in having non-molariform p4 and low-crested talonid of lower cheek teeth.

Etymology Wan, short word for Anhui Province where fossil was found; lestes, robber, usually as suffix of name of insectivora animal; species name is in honour of Professor Li Cuankuei, a well-known paleontologist of China.

Description The horizontal ramus is shallow, with straight bottom margin, flat internal and relative rounded external walls. The depth of labial side at p4 and m2 is 1.5 and 1.4 mm, respectively. The mental foramen is elliptical in shape, situated at middle part of mandible under p3. The posterior margin of symphysis reaches the posterior margin of p2. The masseteric fossa is deep and masseteric crest is distinct, extending forwards to the posterior margin of m2.

The talonid is obviously narrower than trigonid in lower cheek teeth.

p3 is small. The protoconid is big and high. Both paraconid and posterior basal cusp are indistinct or rudimentary. The paraconid of p4 is low but distinct, between which and protoconid there is a pronounced notch. The metaconid is very small and indistinct, tuber-like, against posterointernal wall of protoconid. There is a relatively large cusp on the talonid, like hypoconulid but probably hypoconid. m1 has well-developed trigonid, which is rather higher than talonid. The metaconid is bigger and higher than the paraconid. The metalophid is more transverse, having an angle about 60° with the paralophid. The internal side is a little more concave than the external though the talonid is still trechant. Thus the cusp on the talonid is most probably hypoconid, behind which is hypoconulid. There is no entoconid. m2 is somewhat smaller than m1, but more elongate. It is similar to m1 in morphology but with hypoconulid higher than hypoconid.

Remarks The Qianshan specimens have cone-like lower premolars, high trigonid of lower molars, and only two lower molars. These characters resemble those of *Sarcodon*, *Prosarcodon* and *Hyracolestes*. But *Sarcodon* has distinct entoconid on m1. *Hyracolestes* possesses somewhat basin-

like talonid though without entoconid on lower molars. The p4s of above two genera are more molariform than that of new form. *Prosarcodon* is similar to Sarcodon in lower cheek teeth. All three genera above were placed in Micropternodontidae by McKenna and Bell (1997). Within this family *Sinosinopa*, Middle Eocene genus of China, differs from the new form in having three lower molars. In North America *Micropternodus* and *Clinopternodus*, Late Eocene and later in age, have more molariform p4 and three lower molars. *Jarveia* from the Late Paleocene of Kazakhstan has three lower molars and basinlike talonid. *Carnilestes* from the Middle Paleocene of China differs from new form in having entoconid and basinlike talonid of lower molars although it also has only two lower molars.

Apart from Micropternodontidae, didymoconids also possess two lower molars and somewhat trechant talonid in later forms. But the difference between Qianshan specimen and that of didymoconids is distinct. In didymoconids lower molars as well as p4 possess protoconid and metaconid in pairs, whereas in Qianshan specimen the protoconid is much higher and larger than metaconid. Furthermore, earlier genera, like *Archaeoryctes*, still have basinlike talonid of lower molars. So Qianshan specimen probably represent a new genus, here named as *Wanolestes*.

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