

## 云南禄丰—巨大的卞氏兽类化石

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在地质陈列馆由胡承志同志于 1959 年采自云南禄丰的爬行类化石中,有一块破碎的卞氏兽类的化石。由于标本(部分头骨)已受强烈风化,详细构造已无法辨认,但这仍然是一个有意义的发现,因为它表示在禄丰动物群中有一种身体异常壮大的三列齿兽类 (*Tritylodontia*) 从保存部分的大小估计,较云南卞氏兽 (*Bienotherium yunnanense*) 的身体几乎约大一倍左右,而云南卞氏兽已经是现知的三列齿兽类中最大的一种。

这个化石采自禄丰城东北的黑果蓬,与周明镇、胡承志(1959)记述的禄丰兽 (*Lufengia*) 和不久前孙艾玲(1962)描述的全椎目型迷齿类两栖类的化石发现于同一地点与层位。在层位上可能比云南卞氏兽稍高,但从有迷齿类化石共生的情况看来,表示化石层的时代可能仍不超过三迭纪。

标本保存部分包括:左、右上颞骨,左侧的部分腭骨、前颞骨及颞弓前端的基部;右上颞骨已与左侧分离,带有四个颊部牙齿,左上颞骨上带第一及最后一牙齿(第七)的部分齿根及第 2—6 颊齿的残余。

头部各骨头的轮廓不清楚,从标本看到的动物头骨上最主要的一个特点是异常粗壮,在颞弓部分表现最为明显。从保存部分测量颞弓前端根部的前后直径长度超过 32 毫米。这一点可表示头骨的其他部分也较粗壮,估计前面的门齿与云南卞氏兽中一样形成齧齿式的大牙,并也相应较为粗大。标本上各牙齿的构造已都模糊不清,但仍可以看出基本上与三列齿兽类主要各个种属有相同的构造。每个颊齿由许多小齿尖组成,这些小尖在牙齿嚼面上纵向排成三列,每一个相邻的齿尖列间被一纵沟分开。内侧和中间的一列平均各由三个主要的小尖组成,外侧列由两个尖组成。从保存着的少数齿尖观察,这个标

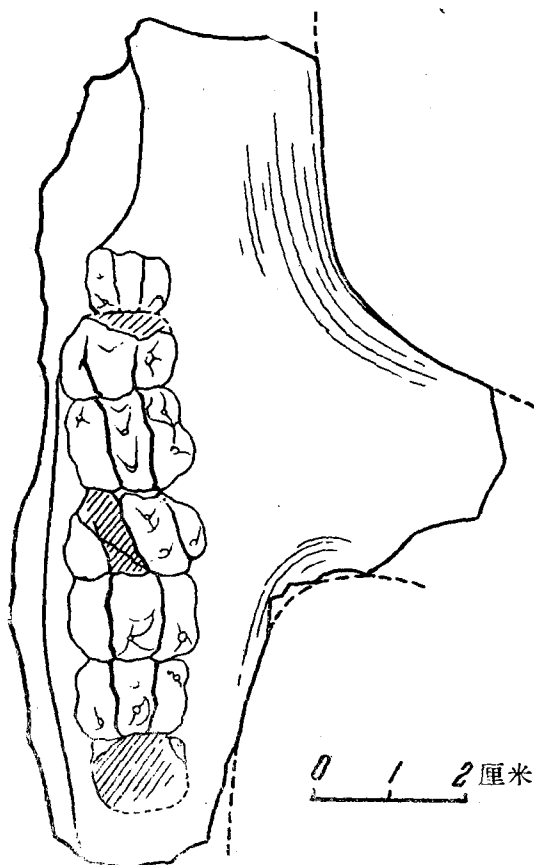


图 1 巨型卞氏兽 (*Bienotherium magnum* sp. nov.) 部分上颞及颊齿素描,示标本大小及牙齿基本构造。原大。

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本上的尖较为尖锐,可能尚未受到很大磨损。但在构造上也有一些特点,即一般都较尖锐,近于卞氏兽属,而在另一些种类(如禄丰兽)齿尖顶部较平。目前的这个标本,或者由于牙齿特别巨大,个别的齿尖显得更呈锥形,而在其他各种内,则近于钩状。与在其他各属中一样,第一及最后一个牙齿比齿列中间的牙齿小得多,第一个牙齿只保存根部,可能已经使用后脱落,最后一个位置很低,深埋在齿槽内。上颊齿的数目为每边七个,与卞氏兽相同。牙齿轮廓亦约成方形。但比在其他各种中更显得较为横宽(表1)。

表1 巨型卞氏兽标本测量及与有关种的比较\*(单位:毫米)

	P <sub>c</sub> <sup>1</sup>		P <sub>c</sub> <sup>2</sup>		P <sub>c</sub> <sup>3</sup>		P <sub>c</sub> <sup>4</sup>		P <sub>c</sub> <sup>5</sup>		P <sub>c</sub> <sup>6</sup>		P <sub>c</sub> <sup>7</sup>	
	L (长)	W (宽)	L	W	L	W	L	W	L	W	L	W	L	W
<i>B. yunnanense</i>	6.5	7	6	8	6.3	7	7	8.5	6	7	4	6.5	—	—
<i>B. elegans</i>	5	6	5.5	6.7	5.5	7	5.3	6	5.7	7	5.5	6.5	—	6
<i>B. magnum</i>	—	—	11	15	13	17	11	16	11	17	10	15	9	12
<i>B. minor</i>	3.5	2	3.2	3.4	3.4	3.4	3.4	3.5	3	3	2	2	—	—

\* 比较数字采自杨钟健 (Young, 1947): 新种标本测量数字,由于材料不好,均为估计或大约数字。

由于标本过于破碎,不可能对化石的各部分构造作详细的观察与比较。因此,无法在属的特征上与卞氏兽相区别;但由其特殊巨大及粗壮的结构,黑果蓬标本无疑代表卞氏兽属或与这一属相近的属中的一个身体巨大的新种。可订名为“巨型卞氏兽”( *Bienotherium magnum* sp. nov.) 它在头骨的大小上几乎接近于现代较小的熊的头骨。

巨型卞氏兽化石的发现进一步表明卞氏兽类以至三列齿兽类,在三迭纪晚期时,已经分化成许多类型,分布于亚、欧、非三洲。且已高度特化,并产生一些大型的种类。

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## A TRITYLODONT SPECIMEN FROM LUFENG, YUNNAN

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### (Summary)

From the Rhaetic Lower Lufeng Formation from which the fossils of *Bienotherium* and the various Saurischians were found, Mr. C. C. Hu of the Geological Museum in Peking had collected a specimen of tritylodont-like reptile, which, though badly cracked and weathered, is rather interesting for it shows the presence of a tritylodont of unusually large size.

The specimen was found at Heikoupeng about three kilometers to the east of the localities of Shawan and Tachun where the *Bienotherium* materials described by Young (1947) were collected. It is from the same locality the fossils of *Lufengia* (Chow and Hu, 1959) and the stereospondyle remains recently described by Sun (1962) were derived.

The fossil under consideration includes two pieces which were joined to each other when found. One of them is a right upper jaw fragment with 4 cheek teeth in place (Pc 2—5). The other which is of the left side and better preserved consists of parts of palatine, anterior root of zygomatic arch and the right upper jaw with five postcanine teeth and the roots of the remaining two in place. The fossils had been subjected to strong weathering and all the details are obsolete. There are seven cheek teeth on each side. As far as can be observed on this specimen, though very large in size, they resemble in constitution those of *Bienotherium*. The characters which particularly distinguishes the present specimen from *Bienotherium* or the other known tritylodonts are its robustness and large size. The cheek teeth row (Pc 1—7) is about 76 mm. long, almost twice that in *Bienotherium yunnanense* which is already among the largest of the tritylodonts. The size of jugal process of the arch is enormous. It has an antero-posterior diameter of more than 32 mm.

The material available is not sufficient for a better understanding and for separating this large form from the genus *Bienotherium*, but it is evidently specifically distinct from the known forms of the group. It is tentatively named as *Bienotherium magnum* sp. nov., noticing the existence of a very large form among the tritylodonts.