

REPLACEMENT NAMES FOR THE THERAPSID GENERA *CRIOCEPHALUS* BROOM 1928 AND *OLIVIERIA* BRINK 1965.

by

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INTRODUCTION

Our knowledge of pre-mammalian synapsid evolutionary history has benefited from over a hundred years of fossil collecting, especially within the Permian-Triassic sediments of South Africa's Beaufort Group (Rubidge 1995) and the Cis-Ural region of Eastern Europe (Ivachnenko *et al.* 1997). In the course of our research and discussions we have discovered several errors in the present state of non-mammalian synapsid taxonomy. Here we propose emendations concerning the genera *Criocephalus* Broom 1928 and *Olivieria* Brink 1965.

Institution Abbreviations—**BP**, Bernard Price Institute for Palaeontological Research, University of the Witwatersrand, Johannesburg; **KM**, McGregor Museum, Kimberley.

Criocephalus

Broom (1928) erected the genus *Criocephalus* for a tapinocephalid dinocephalian. However, the name *Criocephalus* was first used by Mulsant (1839) for the cerambycid beetle *Cerambyx rusticus* Linnaeus, 1758 (Coleoptera; Insecta). Schiödte (1864) used the name *Criocephalum* for Mulsant's *Criocephalus*, despite the fact that the name *Criocephalum* had already been used by Dejean (1835) for a different cerambycid beetle. Broom's *Criocephalus vanderbyli* was based on KM 5138, a fragmentary specimen preserving the occipital portion of a cranium from the Tapinocephalus Assemblage Zone of the farm Abrahamskraal (Prince Albert District, South Africa). Boonstra (1969) placed additional remains from Zimbabwe in an undescribed new species, *C. gunyankaensis* [*nomen nudum*]. Because *Criocephalus* Broom, 1928, is preoccupied by *Criocephalus* Mulsant, 1839, it requires a new generic name, for which we propose *Criocephalosaurus* *nom. nov.* *Criocephalosaurus* is derived from the Greek words *krios* (ram), *kephalos* (head), and *sauros* (lizard), and is masculine.

Olivieria

The therocephalian therapsid *Olivieria parringtoni* was named by Brink (1965). The holotype for this taxon, now catalogued as BP/1/3849 (formerly BPI M379), preserves a complete skull and partial skeleton

that was recovered from high in the *Lystrosaurus* Assemblage Zone of the Bergville District, KwaZulu-Natal Province, South Africa. However, the name *Olivieria* had already been used over a century earlier by Robineau-Desvoidy (1830) as a new generic name for *Musca lateralis* Fabricius, 1775, a tachinid fly (Diptera; Insecta). Earlier still, *M. lateralis* Fabricius had been made the type species of the genus *Eriothrix* by Meigen (1803). To add to the confusion, *M. lateralis* Fabricius was found to have a senior homonym, *Musca lateralis* Linnaeus, 1758. Therefore, *Musca rufomaculata* De Geer (1776), the most senior available synonym of *M. lateralis* Fabricius, became the type species of *Eriothrix* Meigen and *Olivieria* Robineau-Desvoidy. The currently valid name for this species of fly is *Eriothrix rufomaculata* (De Geer 1776), with *Olivieria* Robineau-Desvoidy in the synonymy of *Eriothrix* Meigen (Herting 1984).

As if the situation were not complex enough, Meigen (1838) also used the name *Olivieria*, in reference to a different tachinid fly (*Tachina longirostris* Meigen 1824). By principles of priority, *Olivieria* Meigen 1838 and *Olivieria* Brink 1965 are both junior homonyms of *Olivieria* Robineau-Desvoidy, 1830. The former was recognized as preoccupied in 1848 and two replacement names were advanced: *Rhynchosia* Macquart, 1848 and *Cotilla* Gistel 1848. *Olivieria* Meigen, 1838 and its replacements are currently placed in the synonymy of *Aphria* Robineau-Desvoidy 1830 because the type species *Aphria abdominalis* is a junior synonym of *Tachina longirostris* Meigen 1824 (see Herting 1984). However, the therocephalian "*Olivieria*" *parringtoni* still requires a new generic name, for which we propose *Olivierosuchus* *nom. nov.* as a replacement. *Olivierosuchus* is derived from the Oliviershoek Pass where the type specimen was found and the Greek *sukhous*, meaning crocodile. It is masculine.

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As if the situation were not complex enough, Meigen (1838) also used the name *Olivieria* in reference to a different tachinid fly (*Tachina longirostris* Meigen 1838). By principles of priority, *Olivieria* Meigen 1838 and *Olivieria* Brink 1965 are both junior homonyms to *Olivieria Robineau-Desvoidy*, 1830. The former was recognized as preoccupied in 1848 and two replacement names were advanced: *Rhynchostia* Macquart, 1848 and *Cotilla* Gistel 1848. *Olivieria* Meigen, 1838 and its replacements are currently placed in the synonymy of *Aphura Robineau-Desvoidy*, 1830 because the type species *Aphura abdominalis* is a junior synonym of *Tachina longirostris* Meigen 1838 (see Herting 1984). However, the therocephalian "*Olivieria*" parvingtoni still requires a new generic name, for which we propose *Olivierosuchus* nov. gen. as a replacement. *Olivierosuchus* is derived from the *Olivierosuchus* Pass where the type specimen was found and the Greek *suchos*, meaning crocodile. It is masculine.

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Broom (1928) erected the genus *Crocophalus* for a tapinocephalian dinocerophalian. However, the name *Crocophalus* was first used by Mulsant (1839) for the cerambycid beetle *Crocophalus waltersi* Linnaeus, 1758 (Coleoptera; Insecta). Schiödt (1864) used the name *Crocophalus* for Mulsant's *Crocophalus*, despite the fact that the name *Crocophalus* had already been used by Dejans (1835) for a different cerambycid beetle. Broom's *Crocophalus vanderbyli* was based on KM 2138, a fragmentary specimen preserving the occipital portion of a cranium from the Tapinocephalus Assemblage Zone of the farm Abrahamsthal (Prince Albert District, South Africa; Broom 1969) placed additional remains from Zimbabwe in an undescribed new species, *C. kunyankwara* (nomen nudum). Because *Crocophalus* Broom, 1928, is preoccupied by *Crocophalus* Mulsant, 1839, it requires a new generic name, for which we propose *Crocophalosaurus* nov. gen. *Crocophalosaurus* is derived from the Greek words *krota* (ram), *kephalos* (head), and *sauros* (lizard), and is masculine.

Olivieria

The therocephalian theroptid *Olivieria parvingtoni* was named by Brink (1965). The holotype for this taxon, now catalogued as BMA 349 (formerly BPI M379), preserves a complete skull and partial skeleton