

# Validation of *Chronocancer camilosantanai* Santana, Tavares, Martins, Melo & Pinheiro (Crustacea, Decapoda, Brachyura) from the Romualdo Formation, Araripe Sedimentary Basin, Brazil

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**Abstract.** Santana *et al.* (2022) described a new genus and species of fossil crab, *Chronocancer camilosantanai*, from carbonate concretions of the Romualdo Formation of the Araripe Sedimentary Basin. The journal in which the description appeared was published online only and the new name did not include a ZooBank registration number (LSID), as required for validation of new names in electronic-only publications. The present note serves to validate the name *Chronocancer camilosantanai* by fulfilling the ICZN conditions for nomenclatural availability. The date and authorship of the specific name, accordingly, are those of this note, not Santana *et al.* (2022).

**Keywords.** Nomenclature; Taxonomy; Brachyura; Crustacea; Fossil; New genus; New species.

Santana *et al.* (2022) described a new genus and species of fossil crab, *Chronocancer camilosantanai*, from carbonate concretions of the Romualdo Formation of the Araripe Sedimentary Basin. The species was provisionally assigned to the family Orithopsidae. The material is from the early Cretaceous (Aptian-Albian) and was collected in Pernambuco State, northeastern region of Brazil. The work in which *Chronocancer camilosantanai* was originally described was published in an online only journal (Santana *et al.*, 2020), but did not include the ZooBank registration number (LSID), required for validation of the new names in electronic-only publications [vide Art. 8.5.3 of the amended Code of the International Commission on Zoological Nomenclature (ICZN, 1999, 2012)]. Although the authors provided the journal with ZooBank registrations numbers for the publication, new genus,

and new species names (<https://zoobank.org/ABBE9A7E-6B7F-42B0-86BA-D4A9E210F957>; <https://zoobank.org/9C1BEEF6-C594-4706-90E6-71942F9AB8A3>; <https://zoobank.org/5EE4EB29-3AD6-41EA-A22C-6184B2C1BFA8>, respectively), those are not valid as none of them appeared in the final published version of the article, which thus lacks the evidence that the registration had occurred as stipulated by Art. 8.5.3 of the amended Code of the International Commission on Zoological Nomenclature (ICZN, 1999, 2012). Therefore, the present work serves to validate the name *Chronocancer camilosantanai* by fulfilling the ICZN conditions for nomenclatural availability with new ZooBank registration numbers for the genus and species.

The LSID links are given in the Taxonomy section below and the necessary text was modified from Santana *et al.*, 2022.

## Taxonomy

**Order Decapoda Latreille, 1802**

**Infraorder Brachyura Latreille, 1802**

**Section Raninoida De Haan, 1839**

**Family Orithopsidae Schweitzer, Feldmann, Fam, Hessin, Hetrick, Nyborg, and Ross, 2003**

***Chronocancer* n. gen.**

<https://zoobank.org/72841747-2B4F-48AB-9C40-1775575694E0>

*Chronocancer* Santana, Tavares, Martins, Melo & Pinheiro, 2022: 3 [unavailable].

**Type species:** *Chronocancer camilosantanai* n. gen. n. sp. by present designation and monotypy, gender masculine.

**Diagnosis:** Carapace longitudinally suboval, wider anteriorly, with marked cervical and shallow branchiocardiac grooves; cardiac and metagastric regions slightly swollen, distinct gastric pits on urogastric region. Rostrum moderately long, extending beyond outer orbital tooth, bifurcated, medially depressed longitudinally; laterally expanded and arched, partially covering eyes (the position of the eye probably suffered from taphonomic bias). Orbit wide; supraorbital margin nearly horizontal; exorbital tooth strong, lobe-like, separated from broadly triangular inner lobe by wide, deep gap. Cheliped robust, propodus subrectangular, slightly longer than high; fingers slender, distinctly longer than palm, leaving large gap proximally, apparently crossing at tip when closed; proximal teeth on cutting edge of fixed finger coalescent, proximal-most stronger; dactyl distinctly slender than fixed finger, its cutting edge sinuous to receive propodal teeth. Legs apparently flattened dorsoventrally.

**Etymology:** The generic name is a combination of the Greek 'Kronos', god of time, Latinized to Chronos, and the Latin 'Cancer' (crab).

***Chronocancer camilosantanai* n. gen. n. sp.**

<https://zoobank.org/05FB140B-46E9-495C-AB27-1AC24CA684F7>

*Chronocancer camilosantanai* Santana, Tavares, Martins, Melo & Pinheiro, 2022: 4, figs. 2-4. [unavailable].

**Holotype:** MPPCN CR 4055.

**Type locality:** District of Caririmirim, Moreilândia, west region of Pernambuco State, 07°33'17.27"S, 39°29'58.86"W.

**Stratigraphic unit:** Romualdo Formation, Santana Group.

**Type age:** Lower Cretaceous (Aptian - Albian).

**Diagnosis:** same as for the genus.

**Etymology:** The specific epithet "camilosantanai" honors Camilo Sobreira de Santana, one of the main people responsible for the implementation of the sustainable development project of the Araripe Unesco Global Geopark, Ceará, Brazil.

**Remarks:** A full description and stratigraphic account of *Chronocancer camilosantanai* n. gen. n. sp. is given by Santana et al. (2022).

**AUTHORS' CONTRIBUTIONS:** All authors contributed equally to this note.

**CONFLICT OF INTEREST:** All authors declare no conflict of interest at the submission of the manuscript.

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