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### ***Skryjelites auritus* gen. et sp. nov. and *Quasimolites quasimodo* gen. et sp. nov.— two new middle Cambrian hyolithids (?Mollusca) from the Czech Republic**

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**Abstract.** Two new endemic genera and species of extinct group of Hyolitha, *Skryjelites auritus* gen. et sp. nov. and *Quasimolites quasimodo* gen. et sp. nov. are described and illustrated from the Buchava Formation of the Barrandian area (Czech Republic).

**Key words:** Hyolitha, taxonomy, Cambrian, Barrandian area, Czech Republic

#### **Introduction**

The hyoliths, an enigmatic group of conical Palaeozoic fossils, are one of major components of Cambrian normal marine invertebrate assemblages throughout the world. They have been studied for nearly two centuries (Malinky & Yochelson 2007). However, the biological placement of this group remains uncertain. Hyoliths have been classified as either a class within the phylum Mollusca or as a separate extinct phylum; opinions on the systematic position of hyoliths have been summarized by Malinky & Yochelson (2007). In the Barrandian area of the Czech Republic (Fig. 1), hyoliths are especially abundant and varied, comprising one of the most diverse middle Cambrian assemblages of these fossils in the world; they are known to range from the middle Cambrian to the Middle Devonian (Givetian Stage) in this region (Valent 2006).

#### **Cambrian hyoliths of the Barrandian area**

Cambrian sediments of the Barrandian area contain a diversified skeletal fauna (Geyer *et al.* 2008) including a remarkably varied assemblage of hyolithids represented by both, conchs and opercula (*e.g.* Valent *et al.* 2009). Hyoliths from this region have been the focus of early paleontological investigations in the classical work of Barrande (1867) and in more recent studies by Marek (1983) and Valent (2006). These fossils are common and diverse in several stratigraphic levels and at numerous localities in the middle Cambrian Buchava Formation of the Skryje–Týřovice Basin. Intensive collecting by professional as well as amateur palaeontologists in the last 150 years has led to a large collection of hyolithid material. About 30 hyolithid conchs with opercula preserved *in situ* have been collected from the middle Cambrian Buchava Formation (see Marek 1983; Valent 2006) in the last 50 years. These specimens have been largely unstudied until now. All specimens are deposited in the collection of the National Museum (NM later in text), Prague, Czech Republic.

The aim of this contribution is to describe two new forms of the order Hyolithida, family Hyolithidae, *Skryjelites auritus* gen. et sp. nov. and *Quasimolites quasimodo* gen. et sp. nov., which occur at five different localities in the Skryje Member (Buchava Formation, Skryje–Týřovice Basin) (Figs. 1, 2A). Both new genera and species established in this paper were previously distinguished and preliminarily described by Marek in 1983 in an unpublished report prepared for