

## EGGS, NEST AND EMBRYOS OF THEROPOD DINOSAUR IN UPPER JURASSIC LEVEL OF LOURINHA, PORTUGAL

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In Portugal the presence of dinosaur's eggs remains simore of less common. One probable egg found in 1908 in Kimmeridgian/Portlandian level of Alfeizerao was described by Lapparent and Zbyszewski (1957) but we have doubts about it as a real egg. Others egg's sites are Guimarota (Kimmeridgian), Peralta (Upper Kimmeridgian/Tithonian), Valmitao, Paimogo (not associated with the other discovered recently) (Mateus *et al.*, 1997) and near Lourinha town. So there are seven places with eggs remains in Portugal and five of them are near Lournha, west Portugal. About one hundred eggs concentration in the middle. Two different types of eggs were found, one thick and common and the othe thin and rare (about 5 eggs). The taxonomy of this second type has not yet been identified. Inside of some of the commonest and thicker eggs were found several embryo bones identified as theropod dinosaur. The eggshells have no outer ornamentation, the thickness is amogn 0,6 and 0,9 mm, the pore canals are lightly oblique and seem to be Dinosauroid-prismatic obliquiprismatic type as described by Hirsch (1994).

The empirical estimation of real number of the eggs in the whole nest when they were layed is, in aminimun, 180 eggs. This high number could suggest that these species used a community nest because it is not probable that a single female could lay so many eggs in a short period of time.

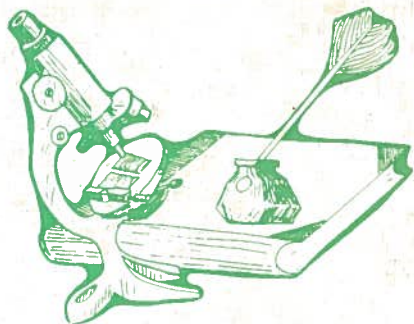
More than 200 bones of several embryos were collected. Among them two fragments of jaw with 2 teeth each, metapodes, part of askull, scapula, femuna tibia, vertebrae, and others of possibly of the same species as the embryos. Further research could confirm it. Associated wiath the nest there was a lower jaw with two teeth of a *Kuethneodon*

*dietrichi* (Mammalia; Paulchoffatiidae), one adult carnivorous dinosaur tooth, one fish tooth, plant's seeds, icnofossiles (annelid gallery perhaps), probably gastroliths (?) and one gastropod.

Any discoveries of dinosaur's eggs from the Jurassic levels are quite rare. The eggs associated with bone are even more rare. So it is very difficult, or even impossible without bones, to do a relation between the type of eggshells and the taxonomic group of dinosaur, and each new discovery of this type is replete of new data and information. Only a few eggs are known as Jurassic. The high number of the eggs and bones association makes this nest one of the biggest known in all world, and probably the most important of the Jurassic.

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# XIII



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