Dataset

3D reconstructions of dental epithelium during *Oryctolagus cuniculus* embryonic development related to the publication "Morphological features of tooth development and replacement in the rabbit *Oryctolagus cuniculus*"

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Abstract
The present 3D Dataset contains the 3D models analyzed in "Morphological features of tooth development and replacement in the rabbit *Oryctolagus cuniculus*", Archives of Oral Biology, https://doi.org/10.1016/j.archoralbio.2019.104576

Keywords: dental development, *Oryctolagus cuniculus*, rabbit teeth, tooth replacement

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Inv. nr	Description
E14	Right cheek teeth, Left and right incisors at 14 dpf
E16	Left cheek teeth, Left and right incisors at 16 dpf
E18	Left cheek teeth and incisors at 18 dpf
E20	Left cheek teeth and incisors at 20 dpf
E22	Left lower cheek teeth and incisors, right upper cheek teeth and incisors at 22 dpf
E24	Left cheek teeth and incisors at 24 dpf
E26	Right cheek teeth and incisors at 26 dpf
E28	Right cheek teeth and incisors at 28 dpf

Table 1. List of the dental epitheliums 3D reconstructions *in Oryctolagus cuniculus* from 14 to 28 dpf included in this study.

INTRODUCTION

The present 3D dataset contains reconstructions of dental epithelium tissues of eight rabbit embryos (*Oryctolagus cuniculus*) from 14 to 28 days post fertilization, see table 1 and figure 1. In the referred original publication, we described the chronology of rabbit tooth development of incisors and cheek teeth from the initiation of the deciduous teeth to the morphogenesis of the replacement teeth using 3D reconstruction of soft tissues.

METHODS

Embryo heads were stained with phosphotungstic acid (PTA) and radiographed using a Phoenix Nanotom S (GE Measurement and Control). The 3D surfaces of the dental epithelium were extracted manually within VG-studio max software. Right and left teeth were segmented in embryos from 14 to 18 dpf and half-heads were segmented in embryos from 20 to 28 dpf. Surface smoothing was done with Meshlab software. The 3D surface models are provided in .ply format, and can therefore be opened with a wide range of freeware.

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BIBLIOGRAPHY

Bertonnier Brouty L., Viriot L., Joly T., Charles C. 2019, 3D reconstructions of dental epithelium during *Oryctolagus cuniculus* embryonic development. Archives of Oral Biology, https://doi.org/10.1016/j.archoralbio.2019.104576

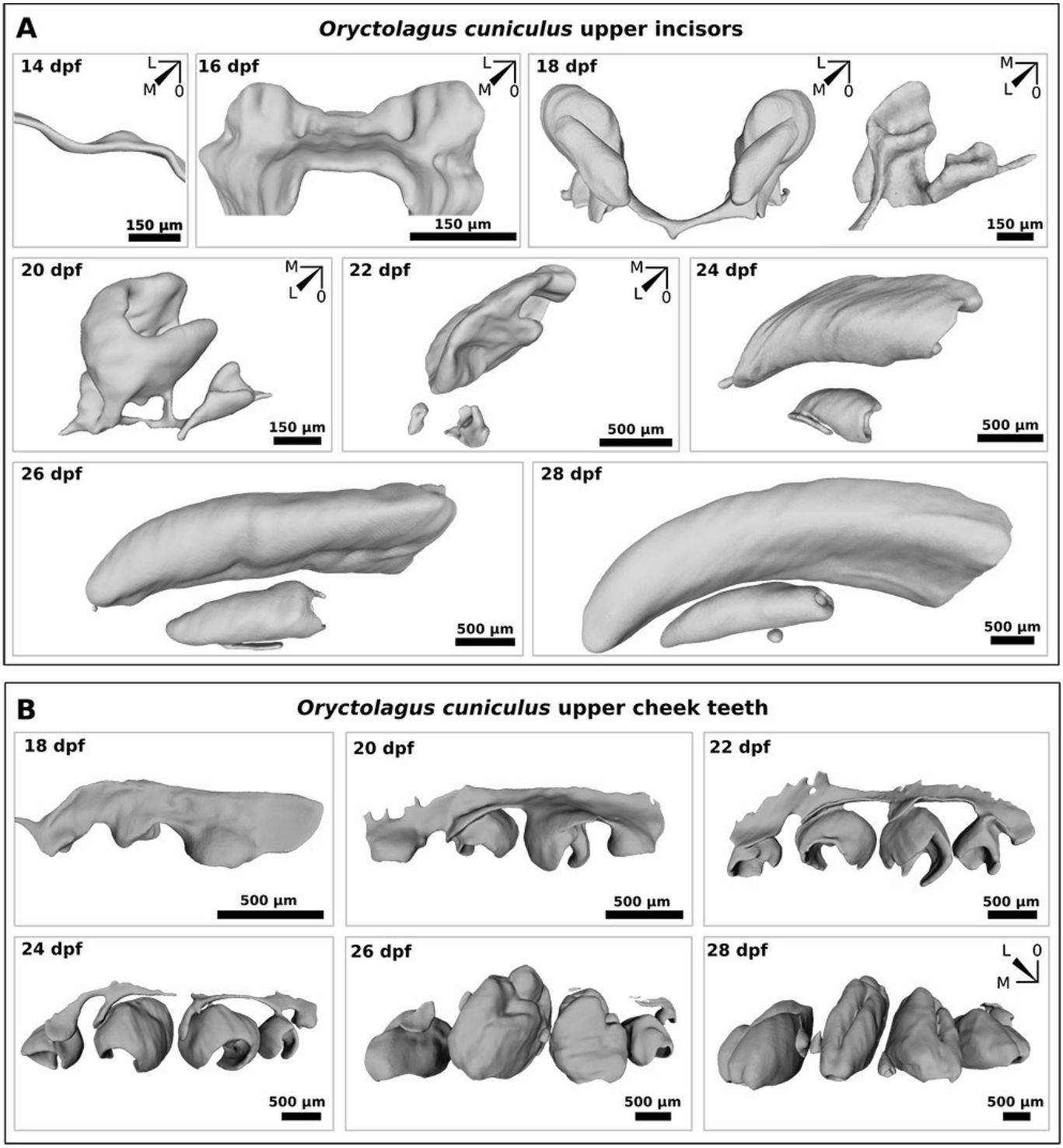

Figure 1. 3D reconstructions of *Oryctolagus cuniculus* upper dental epitheliums from 14 to 28 days post fertilization (dpf). A, Dental epitheliums of upper incisors. B, Dental epitheliums of upper cheek teeth. M, mesial; L, lingual and O, occlusal.

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