



Fig. S1 Comparison of pharyngeal, labral-epipharyngeal and labial-hypopharyngeal muscles of (A) *Claviger testaceus*, (B) *Begrothia saulcyi*, (C) *Pselaphus heisei*, in sagittal view. The muscle numbers in (A) with mark of "*" at the end are rehomologized based on observations in *B. saulcyi* and *P. heisei*. Abbreviations: M7 - M. labroepipharyngalis (0lb5); M9 – M. frontoepipharyngalis (0lb2); M28 - M. submentopraementalis (0la8); M29 - M. tentoriopraementalis (0la5); M30 - M. tentoriopraementalis

superior (Ola6); M41 - M. frontohypopharyngalis (Ohy1); M43 - M. clypeopalatalis (Oci1); M44 - M. clypeobuccalis (Obu1); M45 - M. frontobuccalis anterior (Obu2); M46 - M. frontobuccalis posterior (Obu3); M48 - M. tentoriobuccalis anterior (Obu5); M50 - M. tentoriobuccalis posterior (Obu6); MmIII - Mm. compressores epipharyngis; p, pharynx; t, tentorium.