



Additional morphological features identified during dissections (*A. kojimai*)

Pictured are a) close-up of a neck furrow with an additional central epidermal fold (arrowhead); b) view of the digestive diverticula visible on the adapical – right – side of the visceral hump, with part of the epithelium removed. The overlying epithelium (**Ep**), branching visceral sinus (**VS**, preserved blood removed to reveal channels) and part of the intestine (**In**) are indicated in the accompanying schematic; c) cardio-renal complex- auricle (**Au**) is characterised by a large pool of preserved blood (similar in consistency to blood found in the primary efferent branchial vessel and anterior aorta, which are both removed). The afferent renal vein (**ARV**) is visible where folds on the right side of the nephridium (**Ne**) have been removed. The inset image (ii) is of the ventricle (**V**) cut in half, with the region where blood and muscle fibres co-occur highlighted; d) histological section of the ventricle wall, showing dense arrangement of criss-crossing muscle fibres (stain: Harris' haematoxylin and Eosin Y); e) location of ospradium (**Os**) in relation to the ventral face of the branchial axis (dotted arrow), from which extend the branchial filaments (**BF**). Note the distinct white spongy appearance of the bacteriocyte-rich region of the filaments (**BR**, displaced ventrally during dissection). These regions were white-to-cream coloured and engorged in this way in *A. kojimai* and *A. strummeri* but were a darker brown and highly mucous in *A. boucheti*; and; f) posterior sides of branchial filaments taken from each of the three species, with *A. kojimai* filaments being particularly broad dorsoventrally (note some proximate filament is missing in *A. strummeri*). The free-floating halves lie right of the asterisks.