We thank the reviewer for the valuable criticism and suggestions. We have added responses in color blue (response to the particular question) and in violet (the changes made in the text).

The authors are reporting the mechanical response of the elytra for stag beetles which are known for their battle behavior using their puncturing mandibles. In this work, they are reporting a snap-through mechanism which helps to dissipate a significant amount of energy induced from external contact loads. I found the study quite interesting and the experiments are well-designed to address the questions regarding the deformation mechanisms. Here, I have some comments and questions regarding the study:

- The fixation of the samples in buckling and puncture tests are not described. Have the samples been glued on top of a polymeric substrate? If there was no fixation, how authors ensured that the force-displacement curves (Figures 5 & 8) were not affected by the free movement of the samples (squeezing toward the substrate from the sharp corners of the cut edges)?

In whole elytra samples, we did not fix the samples with glue in order to allow deformation without any constraint. The primary objective of the whole elytra experiments was to demonstrate snap-through behavior qualitatively. Also, in actual scenario, there are frictional locking elements along one side of the edge but they are not fixed in a rigid way. In case of puncture tests, the samples sat firmly on the PDMS polymer substrate and we did not observe any movement in the videos.

In page 4, line 144, 148, 156

“Also, to demonstrate snap-through behavior qualitatively as seen in a living insect scenario, where the elytra held in place with the help of the other elytron and the frictional locking elements, but not fixed in a rigid way.”

“and allow deformation without any constraint.”

“The samples were sectioned out to have minimal possible curvature so that it can rest on the PDMS polymer substrate firmly and we did not observe any movement in the videos.”

- In puncture experiment, since the sample size are kind of small, have authors noticed any correlation between sample size and force-displacement behaviors? In this regard, puncture experiments while the elytron is not dissected from beetle can provide further insights (or maybe it provides more realistic puncture forces).

We have sectioned out similar small sized (4×4 mm) samples to have minimal possible curvature so that it can rest on the polymer substrate firmly and have not noticed any correlation. We have added the following sentences to provide insight into the puncture resistance of the whole elytron.

Page 9, line 320

“In an earlier study, a correlation observed with increased puncture resistance in the cuticle with higher sclerotization [41]. We can thus suggest that the force recorded in our studies will be close to that of the experiment performed on whole elytron.”

- In page 9, line 296, “indentation properties” should change to “mechanical properties using indentation” since indentation cannot be a property of materials.
Text edited