**Address to reviewer comments**

1) Although the authors have not addressed this concern, they have slightly changed the manuscript in order to suggest that the extracts tested herein have therapeutic potential.

However, I am still concerned with the fact that the authors did not change the paragraph between lines 396 and 408 in the page 8 (revised manuscript). If they recognize that intestinal glucose transport into the blood stream depends on GLUT-2 transporter and Na+-K+ pump, why did they keep the glucose diffusion assay to mimic intestinal glucose transport? I do not think that a glucose diffusion assay determined using dialysis tubes can really reflect the complexity of the intestinal glucose transport into the blood stream, let alone conclude that the ethyl acetate fraction of *G. edulis* has a therapeutic potential to reduce postprandial blood glucose based on this assay.

Thank you very much for pointing out this fact again and as a reviewer suggested we understood that glucose diffusion inhibitory assay does not reflex the complexity of the small intestine. Therefore, the sentence has changed accordingly as follows.

The glucose diffusion inhibition test was carried out to evaluate the effect of methanol extract and fractions of *G.edulis* with respect to its glucose retardation activity across the dialysis tube. The glucose entrapment ability of the crude methanol extract and four fractions were found to be significantly different at different times. Among them, the ethyl acetate fraction of *G.edulis* exhibited a significant glucose entrapment ability which decreased the glucose movement into the external solution at 180 minutes compared to the control. The fact that the ethyl acetate fraction exhibited the highest inhibition of glucose diffusion may be due to the presence of insoluble fiber particles which entrap glucose molecules [33]. Since, the dialysis tube method is a simple technique, which only determine the potential effect of methanol extract and fractions of *G.edulis* to retard the glucose diffusion through the normal dialysis membrane, whereas in the intestinal tract, transportation of glucose is assisted by glucose transporters incorporated with other molecules in addition to the intestinal contractions [33]. Therefore, further in-vivo studies should carry out to determine the real effect of methanol extract and fractions of *G. edulis* on glucose diffusion.
2) I believe the authors did not understand my point regarding the number of experiments. My main concern is the fact that they used only one preparation and repeated their experiments four times using this same preparation instead of different ones.

As I said before, I know that the content of phenols, flavonoids, and alkaloids may change according to seasonal variations. My point is that the authors cannot assure that a different preparation from samples collected next February will give the same results, as they have only prepared one extraction and tested it four times. In fact, one would expect that four experiments performed with the same preparation would give similar results, which is the case in the present manuscript.

As I believe the authors will not wait until next February to collect new samples and perform the whole study again, I guess we will not reach an agreement here.

Thank you very much for pointing out this and we agreed with the fact that the reviewer emphasized. During the sample collection, initially, we have collected our samples in February 2018 from the Kalpitiya area to conduct these experiments. According to the results of in-vitro hypoglycemic activity, we wanted to send the fractions of *G.edulis* to Canada to isolate the compounds related to hypoglycemic activity and still it is in processing. We have collected the algae sample again in February 2019 and carried out extractions and fractionation to send the fractions to Canada. During the procedure, they too determined the α-amylase and α-glucosidase inhibitory activity of fractions. They too obtained similar results for the α-amylase and α-glucosidase inhibitory activity with regard to IC₅₀ values. Sri Lanka being a tropical country variations are minimum unlike temperate countries. We only have monsoon and inter monsoon seasons. The weather is more or less similar in a particular district. Country can be divided in to 3 zones; wet zone, dry zone and arid zone and the soil and weather conditions vary in these zones but within zones it is more or less similar except for the rain. I am so sorry for this disparity.

But as a reviewer suggested we cannot assure about the results of phytochemicals, antioxidants of methanol extract and fractions obtained from the particular sample collected in February 2019. But compared to the results of α-amylase and α-glucosidase inhibitory activities, we could think that, methanol extract and fractions obtained from particular sample may have similar content of phytochemicals as in the sample collected in February 2018. Further, we have repeated each experiment four times to ensure the reliability of the data we obtained. I am so sorry for this disagreement.