

Review of: "Investigation of Mechanical Properties of Sisal Fiber and Sugar Palm Fiber Reinforced Hybrid Composites"

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Potential competing interests: No potential competing interests to declare.

1. Create a space between numbers and units.
2. The statement "Common failure modes for the bast fiber-reinforced composite include fiber pull-out, fiber fracture, and matrix cracking, while delamination was reported as the major failure mode for the hybrid composite" was repeated thrice.
3. Change represents to "re-present."
4. There is no connection between the reference "Selvan et al" and "three samples."
5. "The thermal stability and wear behaviour of tri-fillers reinforced hybrid composites are investigated by Sathesihkumar et al," the construction of the sentence and punctuation marks should be checked.
6. Which is right? Fig 1.2 or Fig 1 for the Sisal plants with chopped leaves.
7. For each of the fiber, you must tell us the quantity used, particle size, the source of the fiber, and the location where it was obtained. The reference(s) for the treatment approach must be given.
8. Which is right? Two plates or three hybrid composite plates?
9. How did you come about these percentages? Sample 1 : 70% resin + 10% Sisal fibre + 20% Sugar palm fibre Sample 2 : 70% resin + 20% Sisal fibre + 10% Sugar palm fibre Sample 3 : 70% resin + 15% Sisal fibre + 15% Sugar palm fibre. Is it from previous works? Did you use the rule of mixture? How did you ensure homogeneous mixing?
10. It should be written as [2,18] instead of [2&18].
11. The dimension here is different from what you have in Figure 7 for the flexural test.
12. Did you produce a composite with the untreated fibre? Why?
13. What is the time period for immersion of the composite in water? For reproducibility, you have to state the time period.
14. It was not stated whether the original weight of the specimens was taken before immersion in water.
15. A flat bar shape (165x19x5) mm. This is contrary to the dog bone shape you showed in figure 7.
16. All these should go under materials and methods: "The tensile strength of a material is the maximum amount of tensile stress that it can take before failure. The commonly used specimen for the tensile test is the flat bar type. During the test, a uniaxial load is applied through both ends of the specimen. The sample was cut into a flat bar shape (165x19x5) mm, in accordance with ASTM standards. Typical points of interest when testing a material include: ultimate tensile strength (UTS) or peak stress; offset yield strength (OYS), which represents a point just beyond the onset of permanent deformation; and the rupture (R) or fracture point where the specimen separates into pieces. The tensile test is performed on the universal testing machine (UTM) Kalpak KIC-2-1000- C, and the results are analyzed

to calculate the tensile strength of hybrid composite samples.”

17. This “e universal testing machine (UTM) Kalpak KIC-2-1000- C,” is different from the Electronic Tonometer – Model PC 2000 you mentioned under materials and methods.
18. All these under flexural test: “The test was performed according to the American Society for Testing and Materials (ASTM) standard D 790. The rectangular-shaped samples were prepared for the experiment. The flexural load was applied until complete fracture. The flexural load versus elongation was recorded for analysis. It is measured by loading the desired shape specimen with a span length at least three times the depth. The flexural strength or modulus of rupture is expressed in MPa. The flexural MR is about 10 to 20 percent of the compressive strength, depending on the type, size, and volume of coarse aggregate used. However, the best correlation for specific materials is obtained by laboratory tests for given materials and mix design,” should go under materials and methods.
19. All these under impact test: “The test was performed according to ASTM standard D 256. The rectangular-shaped samples of size 50mm x 13 mm x 5 mm were prepared for experiments. The impact load was applied until complete fracture occurred. The impact load was recorded manually from the digital readout. A small notch was created in the specimen and fixed to the table of the impact testing machine. The impact pendulum was activated, and the reading was recorded in the digital meter.” should go under materials and methods.
20. The water absorption test was conducted according to ASTM (D1037), which investigates the increase in material weight after being immersed in water. The composite samples with size (152mm× 152mm × 5mm) were measured for their weight for every 24 hours of the immersion period. The weight of the specimen was measured before immersion into water. After 24 hours, the specimen was taken out from the water and wiped with a dry cloth, and weighed immediately. The specimens were submerged for 4 days. Three specimens of each composite sample were tested in a conditioning room with room temperature and 65% RH. The amount of water absorbed by the composites (in percentage) was calculated using Equation 1. $\%W = \frac{W_t - W_0}{W_0} \times 100$ Where W is the percent water absorption, W_0 and W_t are the oven-dried weight, and the weight of the specimen after time t, respectively,” should go under materials and methods.
21. Equation 1 should be re-written using equation editor.
22. This is wrong. Sample 3 has equal percentages (15%) of both sisal and sugar palm fibres.
23. You have not really discussed your results. The results and discussion should have four components:
 - Presentation of results
 - giving reasons for the results
 - Justifying the results with previous works
 - Giving the implications of the results.