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

Rosana Silva[1]

1 Instituto Federal do Espírito Santo (Ifes)

Potential competing interests: No potential competing interests to declare.

The article has methodological and scientific writing problems. It needs a thorough and rigorous review to be considered for publication. Some considerations are outlined below.

ABSTRACT

It is necessary to specify the matrix of the composite and which technical standards were used. Why use 30% fiber? Based on some reference? I suggest making a shorter abstract with essential information.

INTRODUCTION

There is a lot of information in the introduction that needs references. Why is the introduction focused on sports products? The author uses the terms “fiber” and “fibre” in the introduction. It’s important to standardize the text. Regarding the articles cited in the Introduction, there are some that deal with issues unrelated to work, such as thermal stability and wear. There are many publications about natural fiber composites more related to the main focus of the work.

Materials and Methods

There are several paragraphs in Materials and Methods that need to be excluded as they refer to the literature review of the topic. The description of the methodology needs to be improved.

RESULTS

In this section, there's a mixture of results with methodology.

It is necessary to present some statistical analysis of the data. It is not possible to draw conclusions based on the average value alone. Furthermore, the discussion needs to be improved, and the data compared with those available in the literature.

In the section about the flexural test, the sentence below is quoted; however, this sentence seems to have no correlation with the work: “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.”