

Responses to Reviewer 2:

This manuscript is about the composite coating and their drying characteristics. Authors used Chayote for the experimentation. Manuscript written fairly well but need some changes in English to clarify the information delivered.

Following are my main concerns;

1. Title - replace 'or' with 'and' to give correct meaning to the title of the manuscript

Re: The word was corrected in the revised manuscript, as suggested.

2. Materials and Methods -

(a) Give relative humidity values of chemical salts at different temperatures, so readers are aware of the environment they need get saturated salts

Re: The relative humidity of salts was added in section 2.8.

(b) Blanching process should be explained fully and how you maintain the temperature at the required temperature

Re: The process was described as conducted, and we also indicate that temperature was monitored with the aid of a probe tip thermometer, in section 2.2

(c) Please add response surface equation with nomenclature and schematics for your design of the experimentation

Re: The surface response equation was indicated in section 2.5, as well as the variables, factors, and coefficients of the regression. Also, in a new Table, we summarize the statistical, for the significant factor of fresh and blanch slices and added the regression equations in the results section.

(d) drying kinetics models needs why you use these models and how you select the best one based on what criterias should be shown

Re: It was added in the revised manuscript.

(e) never discussed about coating thickness and its effect on drying characteristics

Re: It was added in the revised manuscript

“About the thickness of the coatings, the optimized solutions gave films of 0.083 and 0.076 mm, for the fresh and blanched slices, respectively. Despite coatings protecting chayote from unwanted damage during the air-drying process, increasing the thickness of the coating could lead to an increase in the drying times.”

Results and Discussion:

it is not very clear what are the values given in Table 2. For example moisture after drying (why and how these values are obtained)

Re: Values in Table 2, correspond to the physicochemical measurements, while values from Table 3 were extracted from Figure 5. These data are important to mention because they represent the critical moisture content (X_c) which is the average material moisture content at which the drying rate begins to decline. The fundamentals are not included as is expected that the reader has the basic knowledge of the stages of a drying curve. Nonetheless, we mention in the text that values are obtained from Figure 5, and values at X_c are indicated in Table 3.

“Furthermore, the critical moisture (X_c) is an important parameter that can be obtained from the drying rate curves and represents the value at which the constant rate changes to the falling rate.”

I cannot see any nomenclature anywhere, should need it

Re: The nomenclature of the compounds is mentioned in the text in the section on materials and methods, as well as the equations. However, at the foot of some tables (2, 4, and 5) we repeat the abbreviations, to spare the reader returning to the methodology section.

Comments on the Quality of English Language:

Manuscript written well in English, but need to do further checking for whether sentences are written deliver intended meaning. Also check for typo Errors.

Re: the English was corrected and revised in the whole manuscript.

Other changes:

We added three new references, the surface response plots of the blanched chayote, and the regression coefficients, sum of squares and values of the second order quadratic model in the tables of the appendix A.