Some pointed out aspects in previous review were not properly corrected. The reviewer recommends acceptance with minor revisions on the pointed out aspects.

## Validity of the findings

- 1. Figure 3. The description of standard deviation among replicates not indicates if there is significant difference among the different treatments. The standard deviation measured the amount of variation or dispersion of set of data values within of a same treatment. The authors reported sucrose and yeast extract as optimal conditions for EPS yield when compared to others conditions. The question is: the differences in EPS yields observed for a same strain in different carbon sources (glucose, sucrose, lactose and galactose) are significant? The difference in EPS yields for a same carbon source (medium with glucose, for example) for different strains is significant? The same questions should be done for sucrose concentration, organic nitrogen, inorganic nitrogen, temperature, cultivation time, and pH. For the conjunct of data of EACH graph, I suggest to perform ANOVA two-way with significance level of 0.05. The statistics differences should be represented by symbols in each graph of Figure 3. In legend of figure should be briefly added information about the statistical analysis employed and description of symbols used.
- 2. Figure 6. The description of standard deviation among replicates not indicates if there is significant difference among the different treatments. The standard deviation measured the amount of variation or dispersion of set of data values within of a same treatment. For example, the authors reported that the reducing power of the ascorbic acid, EPS-YO175 and EPS-OF101 at 4 mg/mL concentration are (0.91>0.41 > 0.34). The question is: the reducing power of ascorbic acid, in this concentration, is significantly higher than of EPSs obtained from of different strains? In this concentration, the reducing power of EPS-YO175 is significantly higher than of EPS-OF101? Similar questions should be done for each

concentration level of reductor agents. For the conjunct of data of EACH graph, I suggest to perform ANOVA two-way with significance level of 0.05. The statistics differences should be represented by symbols in each graph of Figure 6. In legend of figure should be briefly added information about the statistical analysis employed and description of symbols used.

## General comments for the author

- 1. In Supplementary Material, in legend "Dry EPS produced on MRS-Sucrose modified media", change the term Fig S2 by term Fig S1 in order to be in accordance with the description performed in manuscript.
- 2. In Supplementary Material, in legend "TLC plate showing the monosaccharide composition of the EPS samples", change the term Fig S1 by Fig S2 in order to be in accordance with the description performed in manuscript.
- 3. Lines 177-179, please, correct the legend referent to formula of the DPPH radical (%) scavenging activity: Ab = Absorbance of blank and Ac = Absorbance of control
- 4. Lines 336-337, your results should be discussed with those reported in literature.