Dear Editor,

In my first review I have already suggested the rejection of this manuscript. Now I confirm my first evaluation.

1) Very poor scientific design, very poor scientific interest, extremely poor discussion of data;
2) The methylation method is an old method for vegetable oils with high acidity (more than 5%) in this manuscript no data for free acidity was presented;
3) Standard error and one-way ANOVA are missed for FAMEs (Tables 1-2-3);
4) Knowing the agronomic treatment is fundamental because the oil composition is strictly dependent by cultivar, cultivation area and agronomic treatments, stage of ripening not only for these species but for each vegetable specie. This is well known;
5) If the Authors made the methylation, why they find no methylated stearic and palmitic acids? The Authors do not explain this;
6) The extraction system by n-hexane do not permit the quantitative extraction of antioxidants (phenols in this case);
7) Why to compare pawpaw and watermelon in the same work? Which is the scientific reason?
8) Why Gallic acid in capital letters in the text?
9) Scarce attention to the presentation: sometime mg/ml and sometime mg/mL;
10) The Authors compared ripe and unripe pawpaw, but only one type of watermelon. Why?
11) If the Authors want to characterize these vegetable oils they should also analyze: sterols, triglycerides, policosanol and so on. In addition, if they want to describe the antioxidant activity of these oils they should determine the tocopherols and phenols by HPLC;
12) Introduction section, last sentence. The Authors want to study these oils also for bio-diesel production but no discussion they made regarding to the possible bio-diesel properties of these oils. No discussion they made in relation to the standard (international regulation) for a vegetable oil as a source for bio-diesel production. No discussion about the standard (international regulation) for a bio-diesel. Which regulations rule a vegetable oil for bio-diesel use? Which regulations rule a bio-diesel? Which parameters are required to determine the possible use for bio-diesel production?
13) The same for the pharmaceutical use;
14) Seeds were stored at 4°C for how long? One day? One year? Ten years?
15) No information about the ripening stage. The FAME composition of a vegetable seed oil changes continuously during the fruit ripening. For this reason it is necessary to inform the reader about the precise ripening stage, for example using the %Brix of the
pulp or the weeks after blossoming, or the pulp color in a precise colorimetric scale of watermelon and papaw. What the Authors define ripe, could be unripe for me. To say ripe or unripe it is not an universal/scientific criterion;

16) watermelon seed oil has an unique flavor. The Authors extracted the oil by n-hexane a non-polar solvent;

17) No information about the GC column for FAME analysis;

18) Very poor presentation of Figure 1;

19) No information about the type of solvent they used (For analysis, for GC) and no information about their origin (label);

20) hexane is n-hexane?

21) When the Authors discuss the FAME composition they have to compare their data with International value required for a vegetable edible oil. First they have to know which International standard to find and discuss.