

Drink. Water Eng. Sci. Discuss., referee comment RC2
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Comment on dwes-2021-19

Bas Heijman (Referee)

Referee comment on "Performance analysis of a basin-type solar still during harmattan"
by Omololu Ogunseye and Kamar Oladepo, Drink. Water Eng. Sci. Discuss.,
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The solar stills in these experiments show a very low productivity (5 times lower or more) compared to conventional solar stills in literature. The problem here is that the authors fail to explain why this productivity is so low.

The solar stills in these experiments show a high TDS in the distillate (about 2x the concentration in literature). The authors fail to explain the bad distillate quality.

Too many parameters are changing in the same experiment to draw any scientific conclusion. To give an example: The correlation between rainfall and productivity is investigated. But during rainfall it is also probably cloudy and the irradiation is much lower. Both glass temperature as well as water temperature are influenced by the rainfall.

It is not clear why the authors selected certain parameters to evaluate. So why for instance correlate relative humidity of the air with the productivity in the solar still? What is the logic behind this? In my opinion the humidity of the surrounding air is not influencing the evaporation/condensation process in the solar stills.