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RESPONSE TO LETTER

Response to Article "Antipyretic Potential of 80% Methanol Extract and Solvent Fractions of *Bersama abyssinica* Fresen. (Melianthaceae) Leaves Against Yeast-Induced Pyrexia in Mice" [Response to Letter]

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Dear editor

We have read the letter of Putri Reno Intan, Ariyani Noviantari, and Sukmayati Alegantina from West Java, Indonesia. They have written in response to our recent publication entitled "Antipyretic potential of 80% methanol extract and solvent fractions of *Bersama abyssinica* Fresen. (Melianthaceae) leaves against yeast-induced pyrexia in mice" in *Journal of Experimental Pharmacology* from two authors.[1]

We want to start by thanking the authors for their interest in and insightful comments on our article.

The first issue brought up by the authors is the differences in the time interval on the rectal temperature measurements between our paper and those of other authors. We chose to follow the protocols outlined by several scholars even though there was a lack of sufficient data on the best standard methodology to follow and inconsistent timing when the rectal temperature was recorded in experimentally produced fever.[2–5]

Moreover, longer reading times increase the likelihood that stress hyperthermia would "contaminate" the results of rectal body temperature measurements. Frequent sampling demonstrates how mice left unrestrained and undisturbed at a regular laboratory temperature can experience a sudden change in core temperature of 3–4 °C over around 30 minutes.[5] So, we aimed to measure rectal temperature at a time of 0.5, 1, 1.5, 2, 2.5, and 3 hours following treatment with crude extract and solvent fractions.

The second concern raised by the author was potentially hazardous contaminants and residues (physical, chemical, and biological pollutants) in herbal remedies. We agreed that preparing medicinal plants for experimentation is the first and most important stage in producing high-quality study results. We used the methodology used by outstanding researchers who have already experimented with herbal medicine for various diseases in mice models.

To this purpose, although inevitable contaminants or residues from herbal medicines might not entirely disappear, tremendous effort has been made to limit potentially dangerous contaminants and residues (physical, chemical, and biological pollutants) on herbal medication in our study. In the section below, we discussed some of the scientific extraction and fractionation procedures used in this work to reduce residues and potentially dangerous impurities to safe levels without negatively influencing the phytochemical ingredients.

First, the plant is collected from a noncontaminated environment. Dust and visible contaminants were removed physically during harvesting; During shipment, the plant material was wrapped in plastic sheets; Gently cleansed with tap water before extraction to remove dust and unwanted materials accumulated in the leaves; Milled to reduce the size and minimize microbial contaminants; Extraction and fractionation with methanol and ethanol remove microbial contaminants; Filtration was carried out to remove residues; Dried at a temperature of 40°C to obtain crude extract and minimize

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viable microbial contaminants; freeze-drying, the extract was further concentrated using a lyophilizer and this also contributes to killing microbial contaminants; Preserved in a desiccator until it was utilized to avoid physical, chemical, and biological pollutants; The laboratory room and other device were washed/polished with disinfectant.[1,6–9]

After all, we will make an effort to take into account the recommendations made for upcoming works.

Finally, the authors would like to express their appreciation for the reader's input on our earlier work. We anticipate more constructive criticism for the improvement of our upcoming projects.

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The authors have no potential conflicts of interest in this communication.

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