

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

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Dear editor

We are grateful to the authors for publishing their research “Antipyretic Potential of 80% Methanol Extract and Solvent Fractions of *Bersama abyssinica* Fresen. (Melianthaceae) Leaves Against Yeast-Induced Pyrexia in Mice” in the Journal of Experimental Pharmacology 2023:15 81–91.¹ Understanding the efficacy of *B. abyssinica*’s leaf extract and solvent fractions in vivo requires an understanding of this information. We would to communicate our thoughts on the test of preparation and extraction of plant material method used against yeast-induced pyrexia in mice in this study.

In this study, pyrexia or fever was induced by injecting a suspension of 30% w/v yeast extract powder, at a dose of 3 g/kg or 10 mL/kg, in 0.9% normal saline beneath the nape of the neck. After 18 hours, the rectal temperature was recorded. The temperature was recorded at 0.5, 1, 1.5, 2, 2.5, and 3 hours after dosing with crude extract and solvent fractions. The previous experiment had similar methods.² In another experiment, the temperature was recorded at 30 minutes, 1 hour, 2 hours, 3 hours, and 24 hours after treatment.³

Preparing medicinal plants for experimentation is the first and most important stage in producing high-quality research results. Before beginning the process, it involves extracting and determining the quantity and quality of bioactive components.⁴ The next thing that needs to be done according to WHO standards for herbal medicines is potentially hazardous contaminants and residues. There are potential sources for pollutants and residues, as well as the stages of production where they might be visible. Some of them are regarded as inevitable contaminants or herbal medicinal residues. Physical, chemical, and biological pollutants are the two categories of contaminants found in herbal medicines. There could be significant residues of several agrochemicals and organic solvents in herbal medications.⁵

Because of this, the test is potentially hazardous contaminants and residues on herbal medicine may also be evaluated to be used in the near future to complete methods in preparation of medicinal plants. In general, this study still bears faithfully to the initial principle of “Extraction of Plant Material” that will be used as an antipyretic in mice in vivo and may be further explored and evaluated to address the suggestions stated above.

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Disclosure

The authors report no conflicts of interest in this communication.

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