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LETTER

Response to Article "Evaluation of the Anti-Malarial Activity of the Crude Root Extract and Solvent Fraction of *Sesamum indicum* (Fabaceae)" [Letter]

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Dear editor

We read, analyzed, and appreciated Fentaw Girmaw and Getachew Ashagrie's study[1] to assess the antimalarial activity of the crude root extract and solvent fraction of *Sesamum indicum* in mice. Based on their methods, the experimental animals used were healthy *Swiss albino* mice with weight (20–35 g) or age (6–8 weeks). However, the sex of the mice used in this study was not clearly stated in the method section.

Here, it is possible to advise using either both male or female mice in the following research. This is because male dies more frequently than females in plasmodium-infected mice, suggesting that the immune response differs between the sexes.[2] Knowing the varied *P. berghei* infection responses in mice of both sexes and the role of sex hormones in those responses would aid in understanding the physiological mechanisms of plasmodial infections in humans.

Males and females are not equally susceptible to malaria, and this sexual dimorphism may have significant effects on how vaccinations and medications work. On the processes mediating these sexual differences, nevertheless, nothing is known. Sex hormones are what control the primary variations between the sexes.[3]

In their study, Girmaw and Ashagrie reported that the crude root extract and solvent fractions of *Sesamum indicum* possessed a dose-dependent antimalarial activity and a significant change in other parameters in both models that strengthen the traditional claim.[1] However to further enrich the results obtained and as a basis before conducting an in vivo anti-malarial activity of *Sesamum indicum* test, for future study an in vivo antimalarial activities and toxicological assessment of *Sesamum indicum* (Fabaceae) test can be carried out first.[4] So that, the classification of the extract can be determined whether it is classified as high extract activity at IC50 <5 mg/mL, promising activity at 5–15 mg/mL, moderate activity at 15–50 mg/mL, and inactivity at > 50 mg/mL.[5]

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Disclosure

There are no conflicts of interest among the authors of this communication.

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