Author's response to reviews

Title: In vitro anti-Onchocerca ochengi activities of extracts and chromatographic fractions of Craterispermum laurinum and Morinda lucida

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Onchocerciasis caused by Onchocerca volvulus is a neglected tropical disease which is the world's second infectious leading cause of blindness. Ivermectin is the only approved drug used for control but has the limitation of being only a microfilaricide and is under the threat of resistance. The present manuscript titled In vitro anti-Onchocerca ochengi activities of extracts and chromatographic fractions of Craterispermum laurinum and Morinda lucida is an original work by Samje et al. The research was designed and conducted respecting ethical norms. The study has unfolded the filaricidal activity of both the crude extracts and fractions of the two plants. The most active extracts had a 50% inhibitory concentration (IC50) of 250 µg/ml and 125 µg/ml on adult female worms for respectively C. laurinum and M. lucida. The extracts demonstrated more activity on microfilariae with IC50s of 93.73 µg/ml and 62.5 µg/ml for C. laurinum and M. lucida respectively. The corresponding chromatographic fractions gave IC50s that were lower than those obtained from the extracts. The active extracts and fractions were tolerated in Balb/C mice during a 14 day period of in vivo study.

This work has thus unfolded a new source of potential drug candidate for the treatment of onchocerciasis. The study further supports the use of C. laurinum in the management of the disease by traditional practitioners in the disease endemic area.

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