down (KD) of 90% of the Ae. aegypti. This study also assessed the sugar feeding behaviour of Ae. aegypti when a blood host is available; and evaluated the efficacy of an attractive toxic sugar bait against Ae. aegypti in a semi field environment. Dose response experiments to determine KD90 of IVM against Ae. aegypti were done in laboratory conditions through a serial dilution of IVM in 10% sugar solution in separate cages. Mosquito mortality was observed at 4, 8, 24 and 48 hours post introduction of the treatments. Ae. aegypti feeding preference between sugar and blood meal was determined by releasing female Ae. aegypti into a cage in which both rabbit and sugar bait were deployed. Mosquito feeding status was detected after 24 hours. Ivermectin was toxic against female at 4‰ IVM dose. Over 90% of male and female Ae. aegypti were knocked down 48 hours post sugar feeding on sugar solutions containing at least 4% IVM respectively. Sugar bait significantly reduced Ae. aegypti blood feeding preference (OR=0.06; 95%CI [0.023-0.134]) within 24 hours. An ivermectin dose (0.04%) is enough to be incorporated into attractive sugar baits (ATS) to achieve 90% Ae. aegypti mortality and would be effective against both sexes of Ae. aegypti. The presence of sugar bait will significantly inhibit Ae. aegypti blood seeking behaviour compared to if there was no sugar bait. Semi field experiments are ongoing to determine the efficacy of the sugar bait against Ae. aegypti in a controlled environment.

WHERE DO THE MALARIA VECTORS ACTUALLY REST INSIDE HOUSES?
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Countries have set ambitious goals towards malaria control, primarily by scaling up effective interventions such as long-lasting insecticide treated nets (LLINs), indoor residual spraying (IRS) and effective case management. LLINs and IRS particularly target indoor-biting and indoor-resting malaria transmitting mosquitoes. It is therefore important to understand resting behaviours of the major malaria vectors inside houses and how much they can be affected by indoor interventions. This would provide crucial information on where best to direct the interventions to effectively prevent malaria. We investigated the resting behaviors of mosquitoes inside common house types in rural south-eastern Tanzania to identify preferred resting surfaces for the two main malaria vectors, Anopheles arabiensis and Anopheles funestus. The study houses were selected based on the following inclusion criteria: i) thatched roofs and un-plastered mud walls, ii) thatched roofs and un-plastered brick walls, iii) corrugated iron roofs and un-plastered brick walls, and iv) corrugated iron roofs and plastered brick walls. In each of these houses, mosquitoes were collected from multiple surfaces (floors, walls, roof ceilings, furniture and utensils, clothes and bed nets) using Prokopack aspirators. Preliminary findings suggest that the two vector species do not only rest on walls, where they could be targeted with IRS, but also on the underside of roofs and other surfaces, such as on beds nets, floors, furniture and utensils. We have detected differences between preferred resting sites between the two major vector species. Additionally, we have observed that different house designs influence the preferred resting surfaces for studied vector species. Particularly, An. funestus. are much more of generalists in terms of their resting surfaces compared to An. arabiensis, even though both species preferred thatched roofs over iron roofs. Besides, while An. arabiensis rest mostly on underside of roofs, An. funestus readily also rests on other surfaces as well, such as the walls and on bed nets.