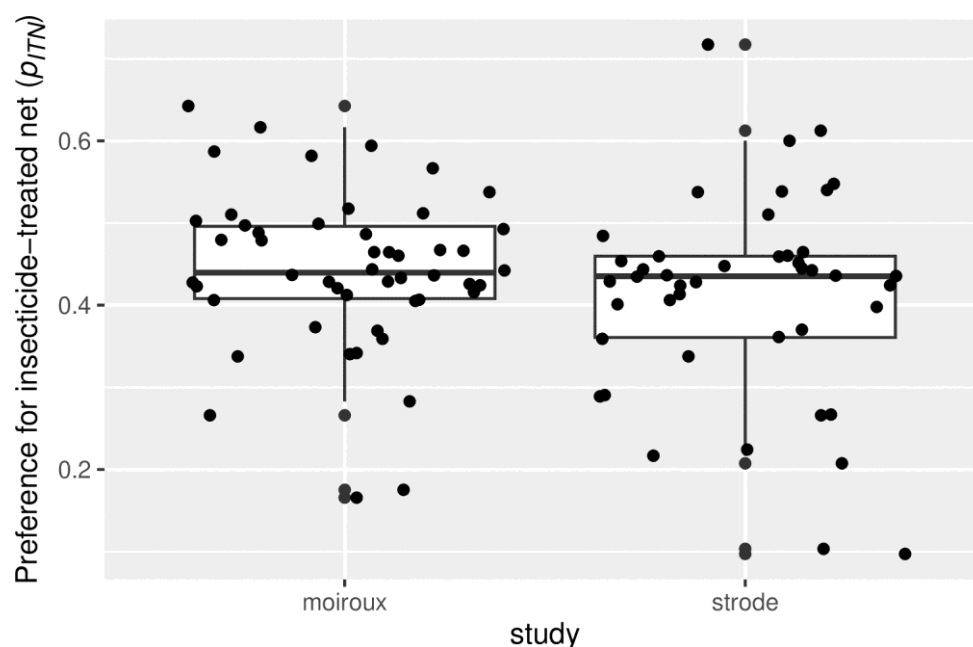


Supplementary materials

Supplement to: Moiroux N, Pennetier C. The potential of attractive insecticide-treated nets (ITNs) in reducing malaria transmission: a modeling study [Internet]. medRxiv; 2025.

<https://doi.org/10.1101/2025.04.02.25325102>.

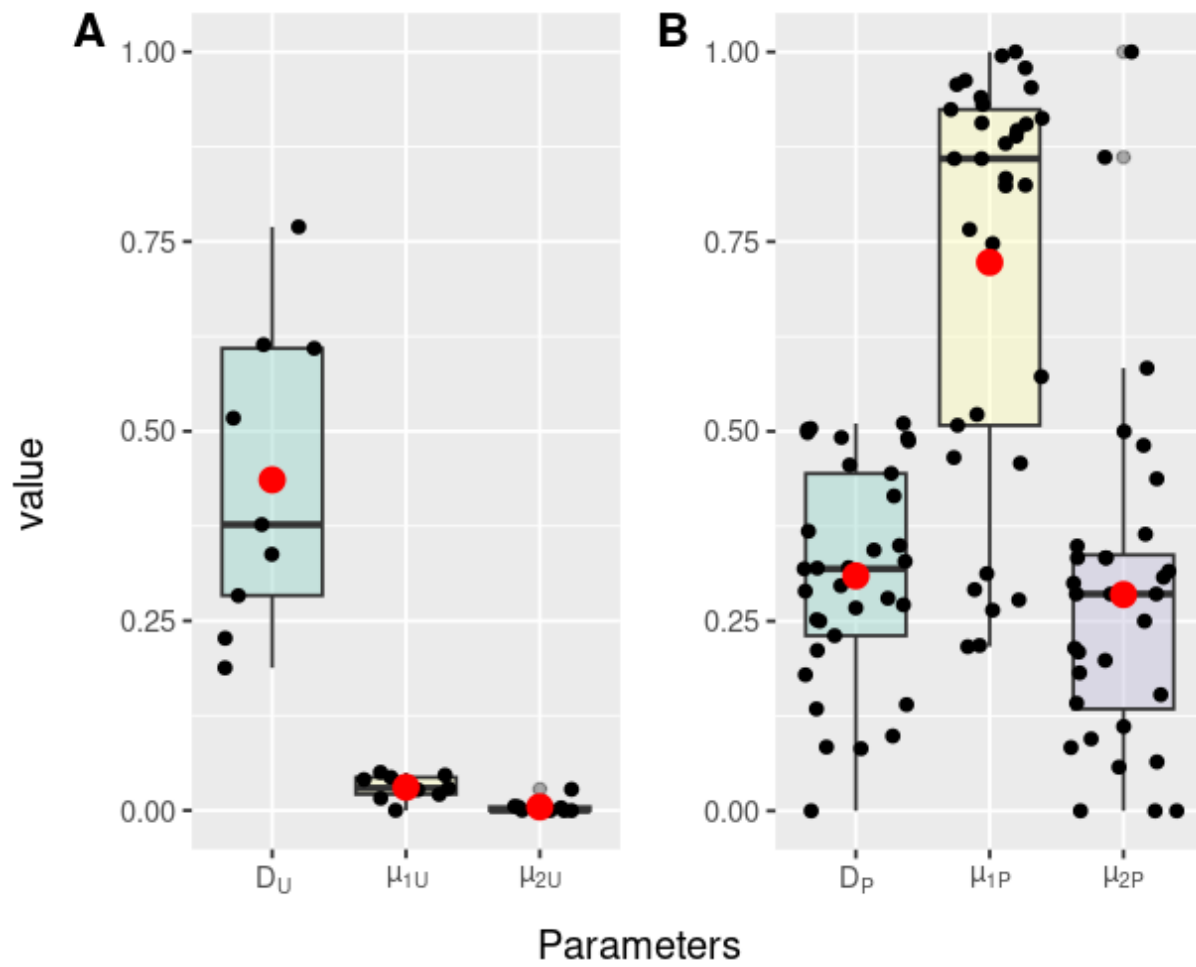


Supp. Figure 1: Vector preference for insecticide treated nets measured in the fields through experimental hut trials.

Data come from two meta-analysis studies (Strode *et al.*, 2014; Moiroux *et al.*, 2017). Each dot represent an ITN. Boxplots show 25th, 50th, and 75th percentiles, whiskers indicate 5th and 95th percentiles. There is 50 values coming from 9 Experimental hut Trials (EHT) in Moiroux *et al.* and 44 points coming from 13 EHT in Strode *et al.* Most of points are below 0.5 indicating deterrence. About 25 % of points are between 0.5 and 0.75 indicating attraction.

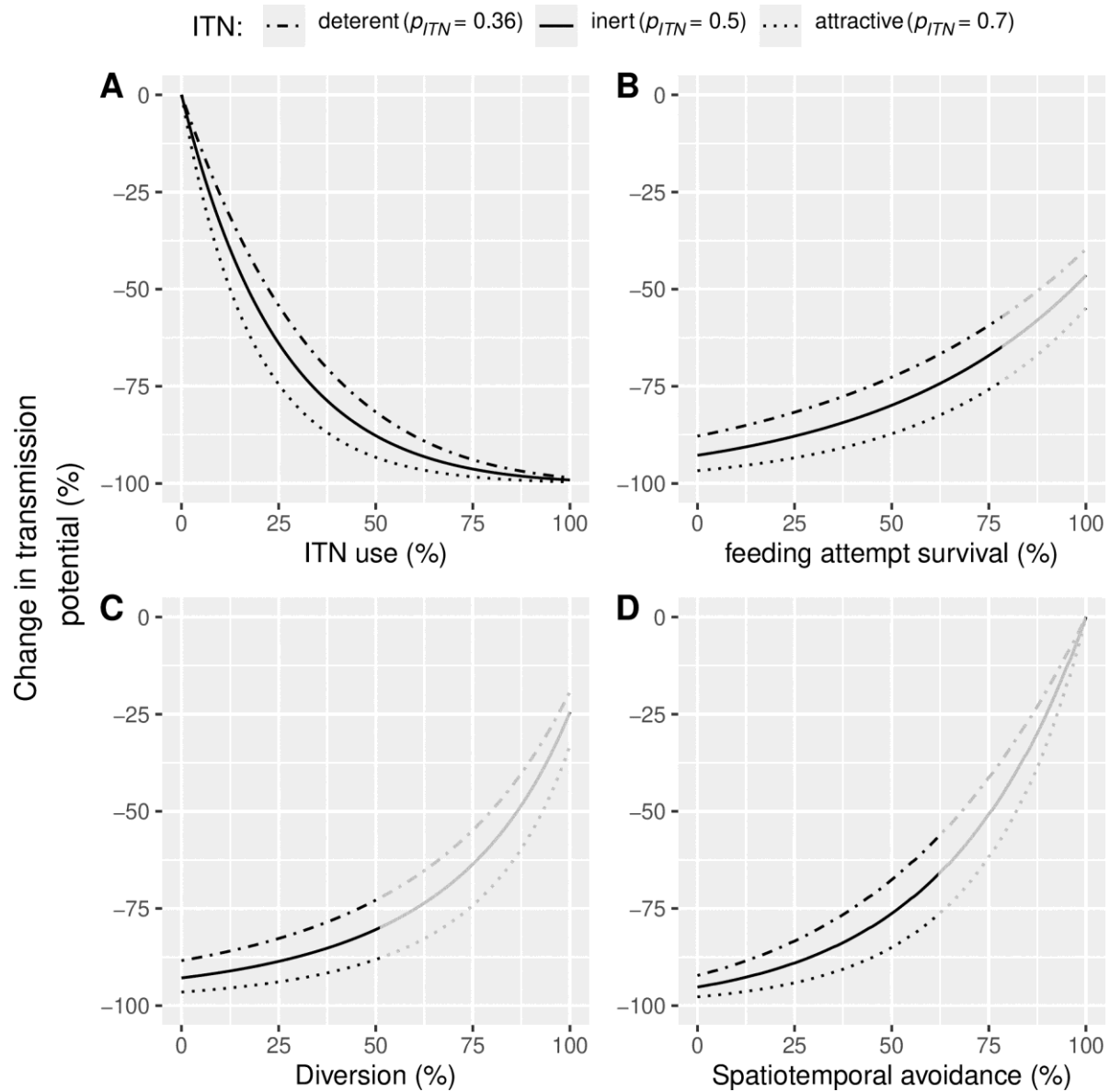
Moiroux, N. *et al.* (2017) 'Remote Effect of Insecticide-Treated Nets and the Personal Protection against Malaria Mosquito Bites', *PLOS ONE*, 12(1), p. e0170732. Available at: <https://doi.org/10.1371/journal.pone.0170732>.

Strode, C. *et al.* (2014) 'The Impact of Pyrethroid Resistance on the Efficacy of Insecticide-Treated Bed Nets against African Anopheline Mosquitoes: Systematic Review and Meta-Analysis', *PLoS Med*, 11(3), p. e1001619. Available at: <https://doi.org/10.1371/journal.pmed.1001619>.



Supp. Figure 2: Fields measure of diversion (D), pre-bite mortality (μ_1) and post-bite mortality (μ_2) in an experimental hut with (A) an unprotected human or (B) an ITN-protected human.

Red dots indicates arithmetic means that were used as default value in the model.



Supp. Fig 3: Reduction in *Plasmodium* transmission potential induced by deterrent, inert, and attractive insecticide-treated nets (ITNs), compared to no nets, for varied levels of (A) ITN usage rates, (B) physiological resistance, (C) quantitative behavioral resistance, and (D) qualitative behavioral resistance.

Lines become grey in ranges of values that were never observed in [12] (supplementary Figure 2).