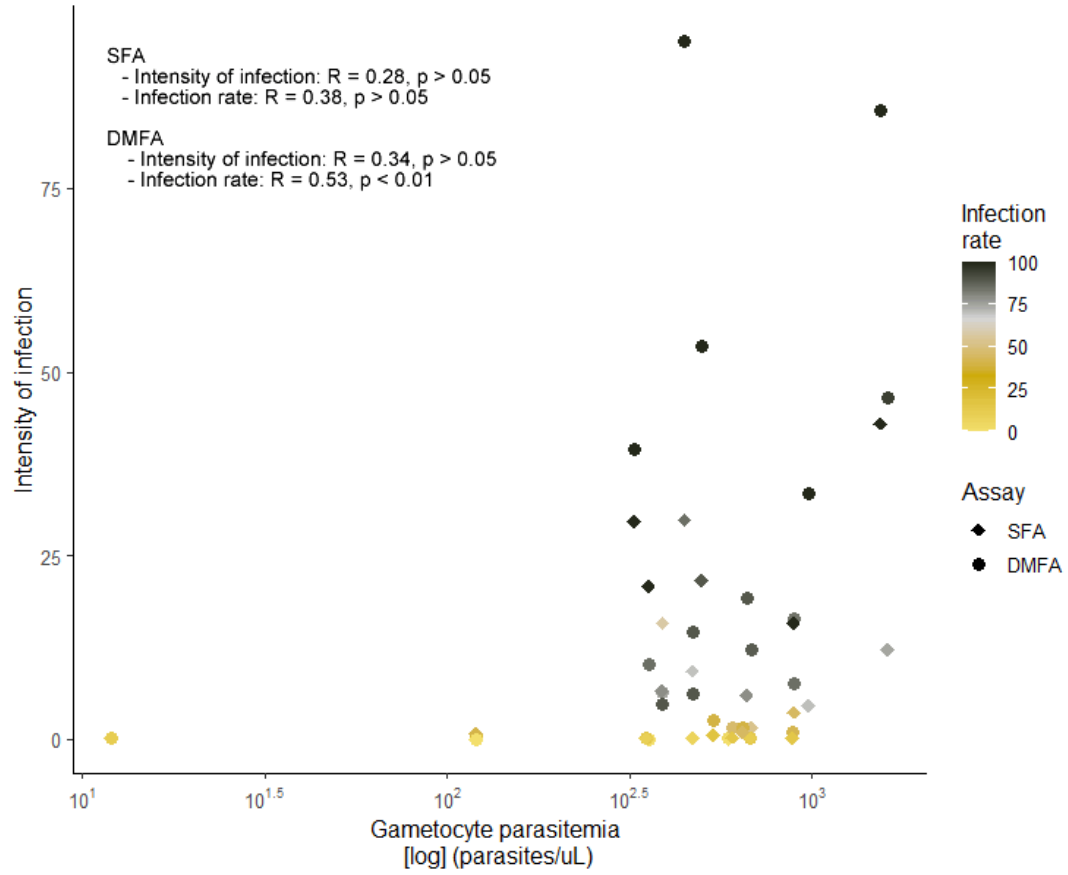


Supplemental Fig S1. Parasite densities over time during 21 days of follow-up in. Follow up of parasitemia (Log 10 parasites/ μ L) in a sub-cohort of participants ($n = 17$). The arrows represent the day of the feeding assay during the follow-up, while the red arrows point to the assays where the mosquitos got infected. The infection rate of these three individuals ranged between 50 to 78%. All symptomatic infections except one cleared after 7 days of treatment (blue triangle, $n = 7/17$). Two asymptomatic infections with positive smear (grey circle) presented parasites during the four time points. Parasitemia in most of the asymptomatic submicroscopic infections declined over the 21 days (yellow rhombus), with the exception of one participant increasing it. All patients diagnosed by microscopy were referred to the closest health post for treatment.



Supplemental Fig S2. Correlation between sexual parasite density with the intensity of infection and infection rate in both SFA and DMFA experiments.

Supplemental Appendix

REAL TIME PCR – PROTOCOL MANGOLD 2005

Primers:

PLF1 5-TAACGAACGAGATCTTAA-3

PLF2 5-GTTCCTCTAAGAAGCTTT-3

The thermo cycling condition consisted of an initial denaturation at 95 °C for 2 minutes, followed by an amplification for 40 cycles of 20 seconds at 95 °C, 20 seconds at 52 °C, and 30 seconds at 68 °C with continuous image acquisition, then an extension at 68 °C for 3 minutes; and finally, differentiation species *vivax* and *falciparum* was identified by melting temperature (T_m) between (77-75 °C).

REAL TIME PCR- PROTOCOL COX-TAQMAN (ROUGEMONT 2004)

COX for Plasmodium spp detection using the target 3'UTR for COX III:

Forward COXIII_F: 5-CGGTAGATAGGGAACAAACT-3

Reverse COXIII_R: 5-CTTTCCTGGAGGTTACG-3.

The thermo cycling condition consisted of an initial denaturation at 95 °C for 3 minutes, followed by an amplification for 45 cycles of 15 seconds at 95 °C, 15 seconds at 60 °C, and 15 seconds at 68 °C with final extension from 3min at 70 C. Finally, a melting curve between (70 - 90 °C).

TAQMAN to determination of *P. falciparum* and *P. vivax* based on 18S ribosomal target:

PRIMERS

Forward PLS 1 : 5' GTTAAGGGAGTGAAGACGATCAGA 3'

Reverse PLS 2 : 5' AACCCAAAGACTTTGATTTCTCATAA 3'

PROBES:

P. vivax : 5' VIC - AGCAATCTAAGAATAAACTCCGAAGAGAAAATTCT - QSY 3'

P. falciparum: 5' FAM – AGCAATCTAAAAGTCACCTCGAAAGATGACT.

The thermo cycling condition consisted of an initial denaturation at 95 °C for 10 minutes, followed by an amplification for 46 cycles of 15 seconds at 95 °C, and 60 °C for 1min

Data to generate standard curve to quantify asexual parasites

Parasitemia	2450	245	24.5	2.45
Log(parasitemia)	3.38916608	2.38916608	1.38916608	0.38916608
Cq1	22.23	25.33	28.71	32.50
Cq2	23.17	25.69	28.66	32.89
Cq3	22.03	25.32	28.92	32.48
Cq4	21.92	25.29	29.13	32.26
Cq mean	22.3359918	25.4075767	28.8519206	32.5328773
Standard Deviation	0.49434228	0.16632174	0.18542846	0.22837941
	0.02213209	0.00654615	0.0064269	0.00701996
	a	b	R²	
	-3.4235	33.7597	0.9991666	

