**Supplementary table 1. Sporozoite and/or human blood meal positive *An. culicifacies* identified by multiplex PCR during IRS non-intervention and intervention period.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Month** | **IRS non-intervention period** | | | | **IRS intervention period** | | | |
| **Total *An. culicifacies* subjected for PCR analysis** | **Only sporozoite positive** | **Only**  **Human blood meal positive** | **Both**  **sporozoite**  **& human blood meal positive** | **Total *An. culicifacies* subjected for PCR analysis** | **Only sporozoite positive** | **Only**  **Human blood meal positive** | **Both**  **sporozoite**  **& human blood meal positive** |
| **January** | 25 | 0 | 1 | 0 | 55 | 0 | 1 | 0 |
| **February** | 50 | 5 | 4 | 1 | 60 | 1 | 1 | 0 |
| **March** | 30 | 5 | 3 | 1 | 50 | 2 | 1 | 1 |
| **April** | 25 | 3 | 3 | 1 | 100 | 6 | 3 | 4 |
| **May** | 125 | 20 | 18 | 9 | 55 | 6 | 5 | 3 |
| **June** | 25 | 4 | 4 | 3 | 50 | 7 | 3 | 4 |
| **July** | 50 | 6 | 9 | 8 | 30 | 3 | 3 | 3 |
| **August** | 60 | 6 | 12 | 11 | 30 | 1 | 2 | 2 |
| **September** | 50 | 9 | 8 | 10 | 20 | 2 | 1 | 1 |
| **October** | 60 | 12 | 8 | 13 | 20 | 2 | 2 | 1 |
| **November** | 45 | 7 | 4 | 12 | 25 | 2 | 1 | 2 |
| **December** | 34 | 7 | 6 | 11 | 22 | 3 | 3 | 3 |

Numerical values in the table represent number; Species undetected for sporozoite and/or human blood by PCR are categorized as sporozoite and human blood meal negative; Here IRS non-intervention and intervention period represents the year 2016 and 2017 respectively.

**Supplementary figure.1.** Per Man-hour Density (PMHD) of *Anopheline* species collected in Belgaon sub- center during Deltamethrin IRS non-intervention and intervention period. Error bar represents standard error of mean.

**Supplementary figure. 2.** Multiplex PCR assay for detection of *Anopheles culicifacies*, human blood meal & plasmodial sporozoite. The size of the ethidium bromide stained PCR products were examined by agarose gel electrophoresis. Lane M: 50bp ladder; Lane 1, 6: *An. culicifacies* with human blood meal: Lane 2, 8, 9: *An. culicifacies* with plasmodial sporozoite; Lane 3: *An. culicifacies* with both human blood meal and plasmodial sporozoite; Lane 4, 5, 7: *An. culicifacies* negative for human blood meal and/or plasmodial sporozoite.

*An. culicifacies* (290bp); *Plasmodium falciparum* (429bp); Human blood meal (519bp)