**Highlights**

* Study focus the settling and ovipositional behavior of *Bactrocera dorsalis and B. correcta*
* Study focus the repellency of four botanicals (*Seriphidium brevifolium, Piper nigrum, Azadirachta indica,* and quercetin) against *Bactrocera dorsalis and B. correcta* that have not been tested before.
* Extracts of *S. brevifolium, P. nigrum, A. indica* and quercetin were effective to reduce the visits, ovipositional punctures, and pupae of both species.
* *Piper nigrum* was more effective against both species*.*