

The use of essential oils of chiropterochoric fruits for the attraction of fruit-eating bats: a potential tool for the recovery of forest ecosystems.

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Previous tests with essential oils extracted from ripe chiropterochoric fruits suggested that they could be used to attract and capture fruit-eating bats inside forest remnants. To evaluate the efficiency of these oils to attract frugivorous bats to open degraded areas we performed field tests with mimetic fruits of *Piper gaudichaudianum*, *P. crassinervium* (Piperaceae) or *Ficus insipida* (Moraceae) attached to two groups of mist-nets set 50 m away from the border of a Semideciduous Seasonal Forest remnant. One group of mimetic fruits received the corresponding essential oil isolated through hydrodistillation and the other group received water only. From a total of 112 frugivorous bats from six species captured in six tests of two nights each, 79 were in nets with oil ($P=0.0000$). *Artibeus lituratus* represented 91% of all captures, with 42 individuals trapped in nets with oil of *F. insipida*, against 23 in nets with water ($P=0.0184$), and 28 in nets with oil of *P. gaudichaudianum*, against only seven in nets with water ($P=0.0004$). As expected, the essential oils produced a significant attraction upon fruit-eating bats. However, the highly significant attraction of *A. lituratus* by the oil of *P. gaudichaudianum* was unexpected, since this bat is a specialist on *Ficus* spp. fruits. So, we hypothesize that in habitats with little or no fruit it is possible to attract frugivorous bats with the odor of several mature fruit species besides the preferred ones. In any way, the proposed technique will potentially increase seed rain at specific locations, being particularly promising to forest restoration projects.