



Pollination of *Philodendron propinquum* Schott (Araceae): A New Pattern in the Lineage *Philodendron*

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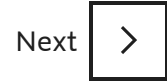
Premise of research. *Philodendron* subg. *Pteromischum* has different floral traits and smaller inflorescence size than other species from the *Philodendron* lineage (genus *Thaumatophyllum* and *P.* subgenus *Philodendron*). We examined the flowering cycle, thermogenesis, and effective pollinators of *Philodendron propinquum* (*P.* subgenus *Pteromischum*) and compared them with the pattern described for *Thaumatophyllum* and *P.* subgenus *Philodendron*.

Methodology. A population of *P. propinquum* was monitored at Reserva Biológica do Tinguá in southeastern Brazil. Through both instantaneous and continuous observations, we recorded spadix temperature dynamics and opening and closing, as well as flower visitors. Visitors were collected for identification and analysis of pollen loads. To detect whether spontaneous self-fertilization occurs, inflorescences were bagged before spathe opening. Flower consumption by pollinators was also recorded.

Pivotal results. The flowering cycle in *P. propinquum* lasted 2 d, during which the small spathe remained permanently open; no noticeable thermogenesis was recorded. Two individuals of *Erioscelis* sp. with pollen grains of *P. propinquum* adhered to the body were observed visiting the inflorescences and feeding on the sterile units. Visits lasted about 15

min, and the sterile units were massively consumed. No spontaneous self-fertilization occurred in *P. propinquum*.

Conclusions. Despite the insufficient shelter and absence of floral heating, as well as smaller availability of feeding resources compared with other species from the *Philodendron* lineage, inflorescences of *P. propinquum* are pollinated by *Erioscelis* beetles, similarly to those belonging to the above lineage.



Keywords

anthesis; beetle syndrome; flowering cycle; floral visiting; pollen load; pollinators; *Pteromischum*; thermogenesis

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