

Panther chameleons *Furcifer pardalis* using aerial cables in urban habitats

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The panther chameleon *Furcifer pardalis* Cuvier 1829, was introduced from Madagascar to Réunion Island in 1750 and 1830 (Cheke, 1987; Probst, 1998). Despite being an introduced species, this chameleon is commonly considered a native, locally called 'endormi' for 'asleep', and is protected by French law. In its native range in Madagascar, the species is mainly observed in open areas such as forest edges, shrubby or semi-natural areas, where it benefits from a good overview of its environment (Andreone et al., 2005; Lutzmann, 2006). However, habitat use in anthropogenic environments has been poorly documented. Here we report observations of an adult male *F. pardalis* in an urban situation.

On 7 June 2022, during a survey along electric cables suspended about 10 m above ground, an adult male *F.*

pardalis was observed resting above a busy road at 17:45 h (air temp. 20.7 °C) in the city of Le Tampon [21° 15'45" S, 55° 30'17" E] (Fig. 1A). We followed the chameleon until dusk at 18:02 h (20 °C). The next morning at 08:10 h (18.7 °C, Fig. 1B) the chameleon was still in the same position. Recognition of individuals uses the unique shape of the white lateral stripe, which is fixed in adult male *F. pardalis* (Bourgat, 1969). This early morning observation suggests that the chameleon spent the night on the aerial cable network. Later that same morning at 10:58 h (22 °C) we photographed the same chameleon catching prey that was on an adjacent cable (Fig. 1C).

Road traffic has increased considerably in recent years in Réunion Island and vehicle collisions with chameleons

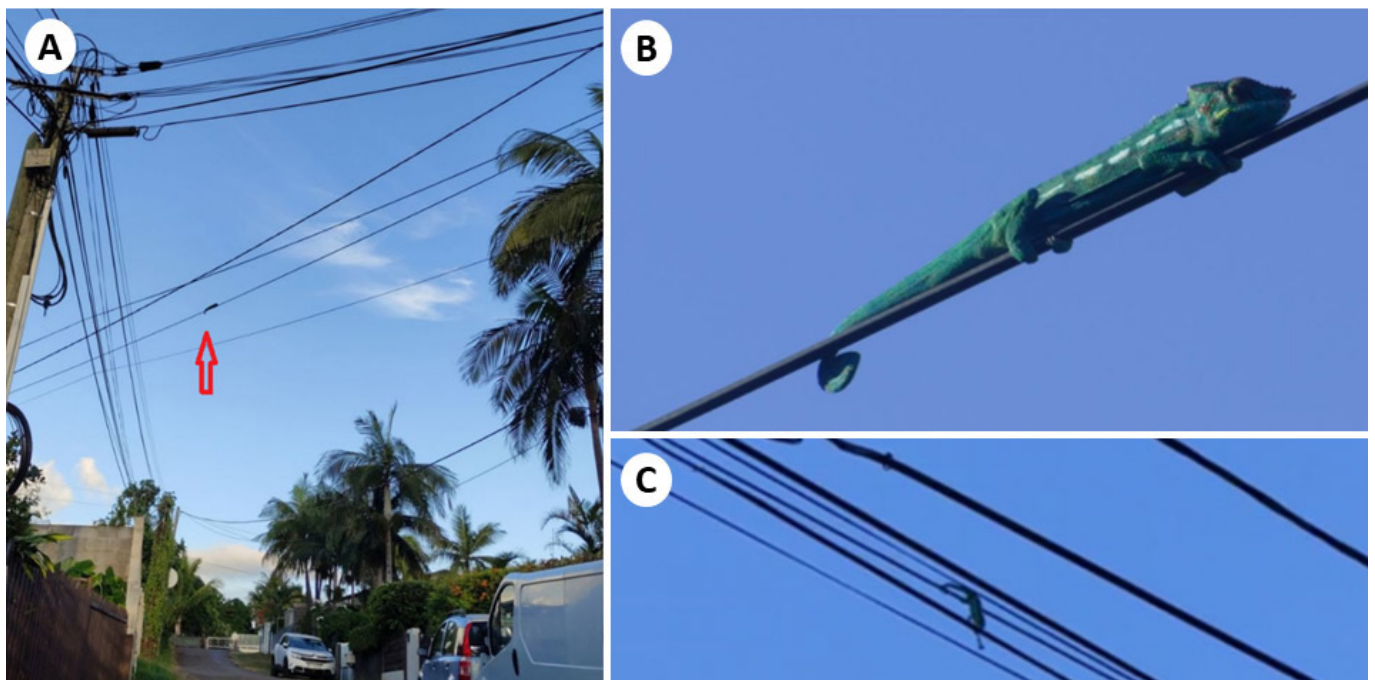


Figure 1. Adult male *Furcifer pardalis* on an aerial electrical cable in Le Tampon - **A.** In late afternoon (chameleon indicated by a red arrow), **B.** The same individual observed the next morning, and **C.** Showing the capture of prey

are numerous (author's personal observations). In its native range as well as in Réunion Island, many anecdotal accounts from naturalists show chameleons moving on the aerial cable network (Nečas, 2004; for one example see Labo SVT2 Canon 2017), presumably these chameleons are predisposed to walk on aerial cables given their similarity to natural branches and vines. Being out of reach of vehicles, humans and domestic animals, such as cats, while moving across roads and gardens provides better chances of survival and possibly facilitates dispersal, mate searching and foraging. Recent radio-tracking results show that in chameleons, males are more mobile than females (Gehring et al., 2008). This suggests that cable networks and ongoing land use change (urbanisation) may have some influence on chameleon population dynamics. Our observations reported here show the use of overhead wires by a male *F. pardalis* over busy city roads and gardens, for nocturnal resting, dispersal as well as feeding. New measures to bury overhead cable networks could have an impact on the population dynamics of urban and peri-urban chameleons. Further studies are needed to explore the spatial ecology of *F. pardalis*, notably to better understand how this species has successfully adapted to highly modified urban habitats.

ACKNOWLEDGEMENT

We would like to thank Jean-Christophe de Massary (MNHN) for sending us the thesis on chameleons by Mr Robert Bourgat.

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Accepted: 14 July 2022