

Predation of an adult Aesculapian snake *Zamenis longissimus* by a western whip snake *Hierophis viridiflavus*

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Ophiophagy is a relatively rare phenomenon in snakes of the Mediterranean regions of Europe, although it has been recorded among both viperid (Freiria et al., 2006) and colubrid snakes (Capula et al., 2014; Di Nicola et al., 2020; Gandini, 2021; Vaccaro et al., 2023). However, no species is exclusively snake-eating (Pleguezuelos & Fahd, 2004; Capula et al., 2014) and most reported cases of ophiophagy are adults feeding on juveniles of other snake species or on adults of much smaller species, e.g. adult western whip snake *Hierophis viridiflavus* consuming the smaller-sized *Vipera aspis* and smaller conspecific (Capula et al., 2014). Cases of adult snakes feeding on adult individuals of approximately the same size are comparatively rare and include an adult *H. viridiflavus* swallowing an adult conspecific in Sicily and an unsuccessful attempt by a western whip snake to predate a similar sized adult *Zamenis lineatus* (Vaccaro et al., 2023). Here we report what we believe to be the first case of an *H. viridiflavus* predating an adult *Zamenis longissimus* of almost similar length.

On 28 June 2015, we observed the case of ophiophagy in a coastal area situated about 20 km north-west of Rome (surroundings of Maccarese) with Mediterranean scrub, pine forest and mixed forest, reed habitats nearby waterbodies. At 10:18 h an adult male *H. viridiflavus*, about 130 cm long, was sighted while ingesting a *Z. longissimus* of almost the same size (Fig. 1). We know the prey to have been an adult due to the size of the visible portion of the prey's body and the colour pattern

which in *Z. longissimus* shows a clear ontogenetic shift from a "maculated" to a "uniform" morph in the adult (Di Nicola et al., 2021). The tail of the prey was projecting from the predator's mouth and appeared motionless. Once approached the whip snake escaped quickly, while still ingesting its prey, from an area with bare sandy soil to another with much higher vegetation, keeping the anterior portion of the body in an upright position.

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Figure 1. Predation of an adult *Zamenis longissimus* by an adult *Hierophis viridiflavus*

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