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A case of cannibalism in *Hierophis gemonensis*: preying on conspecific adult

Slučaj kanibalizma kod zmiје šare poljarice *Hierophis gemonensis*: hranjenje jedinkom iste vrste i veličine

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Figure 1. *Hierophis gemonensis* feeding on conspecific adult

Slika 1. *Hierophis gemonensis* se hrani jedinkom iste vrste i veličine

During the field work in vicinity of Split, Croatia, on May 28th, 2011. Duje Lisičić (photo author) and his team observed a Balkan whip snake (*Hierophis gemonensis* (Laurenti, 1768)) eating a conspecific of similar size (Fig. 1). It was midday, and snake was found among large rocks in low grass in olive growth (43°32'56.29"N; 16°31'1.15"E). It is not unusual for *H.*

gemonensis to prey on snakes (JELIĆ & BORIS, 2011), since this opportunistic snake feeds on variety of vertebrates as well as invertebrate prey (ARNOLD & OVENDEN, 2002). Cannibalistic behaviour has been documented for snakes (ENGEMAN et al., 1996 PERNETTA et al., 2009), but eating conspecifics of similar size has both advantages and disadvantages (POUGH et al., 2001). It is interesting that this highly predatory species has evolved feeding strategy to prey on conspecifics of similar size.

References:

- ARNOLD, E.N. & OVENDEN, D. (2002): A field guide to the reptiles and amphibians of Britain and Europe. Harper Collins, London.
- ENGEMAN, R.M., RODDA, G.H., RODRIGUEZ, D.V. & LINNELL, M.A. (1996): Brown tree snake (*Boiga irregularis*) cannibalism. *The Snake* 27: 149-152.
- JELIĆ, D. & LAUŠ, B. (2011): Record of *Natrix tessellata* as a prey of *Hierophis gemonensis*. *Mertensiella* 18: 450.
- PERNETTA, A.P., READING, C.J., ALLEN, J.A. (2009): Chemoreception and kin discrimination by neonate smooth snakes, *Coronella austriaca*. *Animal Behaviour* 77: 363–368.
- POUGH, F.H., ANDREWS, R.M., CADLE, J.E., CRUMP, M. L., SAVITZKY, A.H. & WELLS, K.D. (2001): *Herpetology*, 2nd edn. Prentice-Hall, Inc., New Jersey.