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Matteo Oliveri, Alena Bartoskova, Filippo Spadola,
Manuel Morici, Marco di Giuseppe, Zdenek Knotek



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Research**Method of Semen Collection and Artificial Insemination in Snakes**

Matteo Oliveri, DVM

Alena Bartoskova, DVM, PhD

Filippo Spadola, DVM, PhD

Manuel Morici, DVM, PhD

Marco di Giuseppe, DVM, PhD

Zdenek Knotek, DVM, PhD, Dip. ECZM (Herpetology)

From the Avian and Exotic Animal Clinic, Faculty of Veterinary Medicine, University of Veterinary and Pharmaceutical Sciences Brno, Brno, Czech Republic (Oliveri, Knotek), Clinic for Dogs and Cats, Faculty of Veterinary Medicine, University of Veterinary and Pharmaceutical Sciences Brno, Brno, Czech Republic (Bartoskova), Veterinary Teaching Hospital, Department of Veterinary Science, University of Messina, Messina, Italy (Morici), Centro Veterinario per Animali Esotici, Palermo, Italy (di Giuseppe).

Address correspondence to Matteo Oliveri, Avian and Exotic Animal Clinic, Faculty of Veterinary Medicine, University of Veterinary and Pharmaceutical Sciences Brno, Brno, Czech Republic. Palackeho Tr. 1-4 Brno Czech Republic. Email address: matteoliverivet@gmail.com. Phone: 00420774322424

Abstract

This study focuses on the method for sperm extraction and artificial insemination in snakes. Ten adult healthy snakes (4.6) have been included in the study (*Pantherophis guttatus* 1.3; *Hydrodynastes gigas* 1.1; *Corallus hortulanus* 1.1; and *Sanzinia madagascariensis* 1.1). Massage of the ventral part of the caudal third of the male snake body for two to three minutes was performed successfully for the semen collection. Both female and male *P. guttatus* and *H. gigas* were placed in brumation, with the female snakes being assessed for ovarian activity after emerging from dormancy. Only females showing ultrasonographic evidence of vitellogenic follicles were included in the study. *Sanzinia madagascariensis* and *C. hortulanus* were maintained at the same temperature through the year, and the ovarian activity was assessed ultrasonographically prior to artificially inseminating the animal. With the aid of a rigid endoscope the fresh semen was delivered through cloaca into the females' oviducts using a catheter connected to the syringe. The technique failed in female *S. madagascariensis* and *H. gigas*. Two female *P. guttatus* laid eggs two months after artificial insemination, with hatchlings emerging following two months of development within the eggs. The third female corn snake did not lay an egg. The female *C. hortulanus* produced eggs four months after insemination. The method of sperm collection consisting of manual massage in

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