

Feeding of *Crocodylus acutus* hatchlings in captivity as a strategy for the conservation of the species.

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Abstract: The study was conducted in the Cipactli Reptile with code: INE/CITES/DGVS-CR-IN-0610-JAL/00, located in the Centro Universitario de la Costa de la Universidad Guadalajara in Puerto Vallarta, Jalisco, Mexico. Four different diets were supplied for one year, recording the growth and survival of artificially incubated *Crocodylus acutus* hatchlings (n = 25 pups). The biometries of the hatchlings at birth were 61.90 ± 0.42 g in weight and 28.19 ± 3.47 cm in total length (Lt). The hatchlings were kept in an aquarium for 112 days, fed twice a week with 90% marine fish and 10% beef liver (diet I), then biometrics were performed and randomized in three aquariums. Three diets were supplied for 253 days, in two, marine fish was replaced by beef liver in 40% (diet II) and 20% (diet III), and one consisting only of fillet of marine fish (diet IV). Diets containing beef liver had the highest somatic growth; diet I presented 21.28 g/month and 2.26 cm/month; while with diet II, 38.53 g/month and 1.62 cm/month were obtained; and with diet III, 43.54 g/month and 1.91 cm/month grew; Finally, with diet IV (100% fish), the lowest growth was obtained, 18.2 g/month and 0.81 cm/month. However, in the diets with beef liver the survival varied, since with diets I and II 100% was obtained; while with diet III only 50%; and finally with diet IV, 66% was obtained. It is concluded that in order to carry out conservation programs of *C. acutus*, the aspects of integral management of organisms that consist of: care of breeders, eggs incubation, revival of hatchlings and establishment of diets according to the life stage should be taken into account.

Keywords: *Crocodylus acutus*, Feeding, Conservation

Type of presentation: Poster

Thematic area: *Ex situ* conservation (Miscellaneous)