

## CHEMICAL IMMOBILIZATION OF THE GREATER NAKED-TAILED ARMADILLO (*CABASSOUS TATOUAY* DESMAREST, 1804) WITH TILETAMINE, ZOLAZEPAM, XYLAZINE AND ATROPINE ASSOCIATION

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### RESUMO

The greater naked-tailed armadillo is a rare Cingulata species with many gaps regarding the knowledge of its ecological and medical aspects; and also management requirements both for exsitu and in-situ conditions. In order to contribute for the species management and conservation, the objective of this work was to evaluate the efficiency of the association of tiletamine, zolazepam, xylazine and atropine for the greater naked-tailed armadillo. The animals were captured during a wildlife rescue in a region characterized by an ecotone of Mixed Ombrophilous Forest with Seasonal Semideciduous Forest, in the State of Paraná, Brazil. After being captured, they were placed in wooden transport boxes and transferred to a veterinary care center. After weighing, the individuals were physically restrained with the use of leather gloves for the intramuscularly drugs administration. Doses were calculated using interspecific allometric extrapolation, based on the usual recommendations for the 10.0 kg domestic dog (tiletamine / zolazepam hydrochloride - 5.0 mg / kg, xylazine hydrochloride - 1.0 mg / kg and atropine sulfate - 0.05 mg / kg). The drugs were combined in a concentrated preparation to which the dehydrated tiletamine and zolazepam contents of a bottle of Zoletil / 50® product are added, the volumes of 0.25 ml of 1% atropine, 2.50 ml of xylazine at 2,0% and 2.05 mL of distilled water. The time of injection was considered to be zero time and all subsequent procedures were determined in minutes after injection (MAI). Once the pharmacological restraint was induced, the animals were submitted to physical and anesthetic examinations. For the quality of the pharmacological association determination, the state of immobility and myorrelaxation were considered. Armadillos were monitored until full recovery and translocated to the natural environment afterwards. Five healthy male adult armadillos with body masses between 1.8-7.040kg were chemically restrained. They lost the postural straightening reaction in  $1.13 \pm 2.26$  MAI and recovered the ability to walk normally in  $71.8 \pm 28.6$  MAI. Myorrelaxation was considered excellent and pelvic limb analgesia was considered good in most of the time. Temperature ranged from 32.2 to 35.1°C, and was not possible to measure by rectal thermometry using regular digital thermometers in two armadillos. Despite the hypothermia observed, it was not necessary to use a special resource for total recovery. Heart rate ranged from 76 to 148 beats per minute and respiratory rate from four to 59 movements per minute. Apneustic breathing state was observed in all animals, and an acupuncture point was used to stimulate breathing, during all the

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procedure. The quality of the pharmacological restraint was considered good. Recovery was considered excellent. Although the protocol allowed the safe handling of animals, due to the effects produced on body temperature and respiratory capacity, it must be applied with caution, especially for free-living armadillos. In such cases, it is essential to monitor individuals until they return to normal ambulation and full recovery.

**PALAVRAS-CHAVE:** Anesthesia, Cingulata, Dasypodidae, Restraint.