

V CONGRESO AMERICANO DE CUNICULTURA, MÉXICO 2014

Facultad de Medicina Veterinaria y Zootecnia, Asociación Científica Mundial de Cunicultura – Rama Americana
Secretaría de Desarrollo Agropecuario del Gobierno del Estado de México, Secretaría de Agricultura, Ganadería, Desarrollo Rural,
Pesca y Alimentación, Consejo Mexiquense de Ciencia y Tecnología

EVALUATION OF ANXIETY OF GROWING RABBITS IN ENRICHED CAGES

THAIS F.M. BOZICOVICH, PAMELA A. GELIER, SIMONE FERNANDES, EDSON R. SIQUEIRA, ANA SILVIA A.M.T. MOURA

Departamento de Produção Animal, Faculdade de Medicina Veterinária e Zootecnia, UNESP,
CEP: 18618-970, Botucatu, SP, Brasil, (Financial support: FAPESP and CNPq)
Corresponding author: pitszoo@fmvz.unesp.br

ABSTRACT

The level of adaptation of growing rabbits to housing and management conditions may be evaluated through their behavioral response to reactivity tests, in which their reaction to and fear of a new environment are assessed. This study aimed to evaluate the anxiety of rabbits that had (or not) access to an enriched environment. A total of 32 male rabbits from the Botucatu genetic group were involved from weaning at 35 days up to 79 days of age. The animals were assigned to a completely randomized design with two treatments (with or without access to environmental enrichment) and allocated to eight wire cages, four animals per cage. Two eucalyptus sticks (15 x 3 x 3 cm) hanging from the cage ceiling were used as enrichments. Anxiety-related (freezing) and locomotion behaviors were evaluated using the elevated plus-maze, in which the animals were allowed to explore two elevated open and two elevated closed arms. Two observations of 5 min each, at 49 and 79 days of age, were carried out. At the beginning of the test, each animal was placed in the center of the apparatus. The latency time to enter the open and closed arms, the number of entries and the time spent in open and closed arms, the frequency of head dipping and of standing up were registered. Growth performance of animals was recorded from 35 to 77 days of age. On day 49, the latency to the first open arm entry was shorter in animals from enriched cages. On day 79, the animals from non-enriched cages stayed longer in the open arms and showed higher frequency of head dipping than the animals in enriched cages.

472





UAEM Universidad Autónoma
del Estado de México

V CONGRESO AMERICANO DE CUNICULTURA, MÉXICO 2014

Facultad de Medicina Veterinaria y Zootecnia, Asociación Científica Mundial de Cunicultura – Rama Americana
Secretaría de Desarrollo Agropecuario del Gobierno del Estado de México, Secretaría de Agricultura, Ganadería, Desarrollo Rural,
Pesca y Alimentación, Consejo Mexiquense de Ciencia y Tecnología

The animals in enriched cages, on the other hand, stayed longer in the closed arms. Feed conversion was poorer in enriched than in non-enriched cages (2.91 ± 0.06 vs. 2.64 ± 0.06 , $P=0.03$), other performance traits (final weight, average daily gain and feed consumption) did not differ between groups. The environmental enrichment had a positive effect on the behavior of young rabbits by reducing their anxiety.

Keywords: behavior, elevated plus maze, environmental-enrichment, performance, welfare



473



Congreso Americano
de Cunicultura
2014



SAGARPA
SECRETARÍA DE AGRICULTURA,
GANADERÍA, DESARROLLO RURAL,
PESCA Y ALIMENTACIÓN



COMECYT
CONSEJO MEXIQUENSE DE CIENCIA Y TECNOLOGÍA