



The Husbandry Management of Mini pig for Bio

-medical Research

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Production and Supply of Minipigs for Biomedical Research (<http://minipigs.angrin.tlri.gov.tw/>)

Introduction

The “Guide for the Care and the Use of Laboratory Animals” as well as the “Animal Industry Act” and the “Animal Protection Act” are the foundation for the husbandry management of mini pigs in TAPS. Standard operation procedures (SOPs) are established for every maintenance and technical procedures for the accuracy and consistency in RAPS. Constant training internally and externally keeps the processes of TAPS most current and up-to-date. The animal maintenance system of TAPS obtained AAALAC full accreditation since 2012 for its good quality of animal maintenance system and technical practice. TAPS welcomes good advices from experts for the welfare of animal in the laboratory.

Housing



Two barn style housings are built for post-weaning minipigs. One of the two barn houses states vacant at a time for sanitization and blocking for any infective agents. Each barn is also protected by nylon gauze to keep out insects and wild birds. Weaners of 6 weeks and older are grouped in same sex with similar age. The number of mini pigs in each group is adjusted for comfort postural and social adjustments. At the end of the housing, a

separated pen is set for pigs needed special care. Farrowing house is divided into 6 rooms by brick masonry walls. Each room has independent entrance to minimizing the disturbance of others. The mini pigs raised in TAPS are from local Lanyu breed which is far adapted to local climate. Currently, the pigs of RAPS are categorized as minimal diseases (MD) status. Natural free flow of air with roof top free convection (mushroom head) device to enhance the air exchange. Plastic bedding and heaters are used for extreme cold weather. Natural daylight from windows is used. Electric light source is used only when technical procedures are performed. High bed above ground with stainless steel grid is used for each pen. Water is provided ad libitum via automatic watering, while the water quality is analyzed seasonally.



Sanitation

Excreta is removed once a day to maintain cleanness, reduce odors, and minimize disease hazards. The enclosures and accessories are sanitized once a week using a combination of detergent and disinfectant. The vacant housing is

flamed before the entering of animal.

Recording

The management checks the facility and surroundings. Data are recorded accordingly, which include the condition of the housing, temperature, health status etc. Supervisor and Veterinarian on site is called upon needed.



Ambient Environment

Pigs are social animal and should be provided with the opportunity to interact with other members, however, sometimes they tease with each other. Toys such as metal chain, and balls made of impervious materials are provided to satisfy the rooting behavior. Broadcasting of soft music also calms both technicians and animals.

