

## **Social-Cultural Value of Black Lanyu Pig Breed and Prospect of Biomedical application of White Binlang Pig Breed**

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Local pig breeds have their unique history, growth environment, social and cultural background. Global experts have made efforts to maintain and promote their values. Lanyu pig is a native breed located on Lanyu Island in southeastern Taiwan. Tao culture in Lanyu is closely related to pigs. The elders said, how could it be possible to become human without pigs? Every family has to raise pigs. Because Pigs are sacrificed for meat rituals, medicinal, praying, etc. Pork is not the main food source for Tao people. It is an important cultural asset linked to the local community. The program plays a central role in the preservation of the Lanyu pig species and the maintenance of the traditional culture of Tao. The study investigated the historical origin of Lanyu pigs, development and utilization of meat quality characteristics, and maintained the biodiversity of protected species and genetic resources. The use of local Lanyu pig breeds has its unique social and cultural value and to provide a plan for the sustainable use.

Pig is considered one of the suitable animal models in biomedical research. Binlang pigs, a breed of white miniature pigs, The first white individual was found from the offspring of Spotty Lanyu pig's full-sib line in 2001. The white herd was established by backcrossing and isolation breeding for three generations of full-sib mating. Then it was registered as a new breed," Binlang pigs," in 2011 and became popular in marketing in 2020. Binlang pigs supply preclinical applications in the domestic biotechnology industry and develop suitable testing models. Taitung animal propagation station is an AAALAC International accredited unit. It promotes the 3R policy and customizes the production of high-quality products according to customer needs. Establishing the supply system of Binlang pigs ensures that the service entrusted by the industry is more conducive to the competitive advantage.

Key words: Binlang pig, Lanyu pig, Taiwan