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Reproductive and Growth Performance of the Indigenous Small Ear Pig from Southwestern China

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Abstract

Xishuangbanna, a prefecture located in the southernmost part of China, formerly was a remote and self-subsistent area between Laos, Vietnam and Burma. Presently it benefits from one of the world's largest infrastructural programs. In conjunction with economic benefits for a majority of the region's inhabitants, this development also implies massive destruction of the formerly highly diverse natural resources. The rising demand for livestock products in the prefecture's capital Jing Hong is met by import of pig meat from remote towns, while Xishuangbanna's local upland pig farmers do hardly participate in this new market. Their resource-driven smallholder production systems are characterised by poor management and poor access to improved fodder and veterinary services. They raise the so-called Small Ear Pig (SMEP), which is one of 9 registered native pig breeds of southern China. The breed is regarded as a local specialty food and renowned for its good taste, easy handling and disease resistance. No data about growth and reproductive performance of this breed is available in global farm animal genetic resource databases yet. Therefore, progeny history records for 219 littering sows were collected during January - April 2009, and the growth performance of 150 pigs is monitored from April 2009 to March 2010. By using the species-independent herd model PRY, reproduction parameters and growth performance records obtained under the current management system are evaluated, and their response to improved breeding and feeding management will be tested through scenario design and assessment. Preliminary results show that under the current conditions, female SMEP reach 60 kg live weight after more than one year of growth, are early maturing (4 months), have long intervals between subsequent litters (> 12 months) and yield an average litter size of 5.6 (± 2.13 , n=423 litters). The relatively high variation of the so-far analysed data supports the assumption that strategies for improvement of SMEP reproductive performance can be identified in order to support local efforts to improve the livelihoods of Xishuangbanna's upland farmers.

Keywords: Bio-economic modelling, litter size, littering interval, pigs, progeny history records