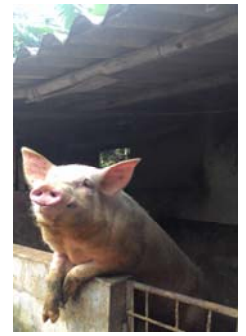


Endoparasites in pigs raised in smallholder farms in Hung Yen province of Vietnam

Duong Van Nhiem^{1*}, Pham Hong Ngan¹, Vu Thi Thu Tra¹, Dinh Phuong Nam¹, Unger Fred²
¹ Faculty of Veterinary Medicine, Vietnam National University of Agriculture, Hanoi, Vietnam
² International Livestock Research Institute, Hanoi, Vietnam



The VetTeam, 2014

Introduction

As being part of an ongoing project (the PigRisk project), assessing animal health and food safety risks in smallholder pig value chains in Hung Yen province of Vietnam, the presence of endoparasites was investigated in a repeated study.

Materials and methods

Three communes, with a total of 545 pig farms, from three districts in Hung Yen province were selected. In each commune, ten farms were randomly chosen. Data on farm management and biosecurity measures were recorded by using a checklist and observations. From each farm, one pooled fecal sample was collected from a randomly chosen barn monthly and followed from June to December 2014. Fecal samples were analyzed for intestinal parasites by floatation and sedimentation methods. The intensity of most commonly seen parasites was determined by the McMaster counting technique.

Results

In 198 collected fecal samples, six types of parasites were detected. Highest intensities were observed for *Eimeria* (maximum 80900 oocyst/g), followed by *Ascaris suum* (2400 egg/g), *Strongyloides sp.* (1900 egg/g), and *Trichocephalus suis* (1300 egg/g); the others were reported at much lower intensities. Infection levels and intensities of the parasites tended to be higher during the hot months, June to September (Figure 2). No significant difference between communes was found. At least one type of parasites was present in 137 samples (69.19%). Most of farms (96.67%) were positive for at least one type of parasites in at least one sample. There was a significant difference in infection level of endoparasites between biogas- and non-biogas farms.

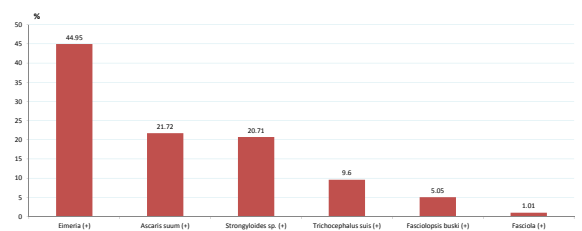


Figure 1. The prevalence of Endoparasites in pigs raised in smallholder farms

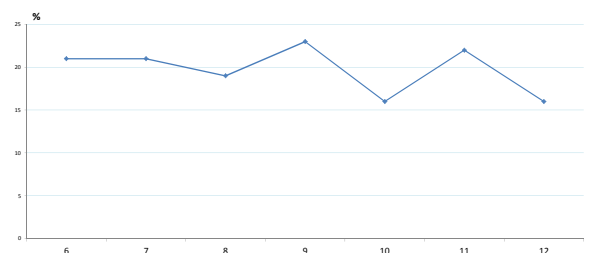


Figure 2. The infection level of Endoparasites in pigs by month

Implication

The general high parasite burden reported in this study will be addressed in future interventions which will include parasite control apart from other measures targeting farm management, biosecurity and disease prevention.



Dr. Duong Van Nhiem
Faculty of Veterinary Medicine, Vietnam National University of Agriculture (VNUA), Gialam district – Hanoi - Vietnam Tel: (+84) 0974.432.678,
Email: dvnhiem@vnua.edu.vn

Acknowledgements: The CGIAR Research Program on Agriculture for Nutrition and Health (A4NH), the International Livestock Research Institute (ILRI), Vietnam National University of Agriculture (VNUA) and Hanoi School of Public Health (HSPH). The project was funded by the Australian Centre for International Agricultural Research (ACIAR)