

23rd MSU-IIT Annual In-House Review of Research and Development Projects



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Silent Saboteurs: (The Hidden Impact of Parasites on Livestock Productivity and Public Health) A case in Iligan City, Philippines

Monday, October 20, 2025 1:00 PM (4 hours)

Abstract: Livestock farming is crucial for global food security, economic development, and cultural practices. Northern Mindanao was one of the key contributors to the country's cattle, goat, and pig livestock production. Parasite infections in livestock hinder productivity, affecting animal health, causing economic losses, and posing a public health risk. This study determined parasite infections in three major livestock commodities: cattle, goats, and pigs in selected areas in Iligan using the Formalin Ethyl Acetate Technique (FEACT) and post-mortem examinations. Parasites recovered in cattle accounts 53% or 17 out of 32 samples were infected with *Fasciola*, *Schistosoma*, *Trichuris*, *Balantidium*, *Strongyle*, and *Paramphistomum*. Notably, 50% of the population is infected with *Fasciola*. In goats, *Strongyloides*, *Trichostrongylus*, *Haemonchus*, *Trichuris*, and *Coccidians* were recovered from 38 of 45 or 84.4% of fecal sample, where *Strongyloides* sp. prevails at 73.3%. In pigs, 37 of 50 or 74% of fecal samples were infected with four nematode species were identified: Hookworm, *Strongyloides* sp., *Trichuris* sp., and *Ascaris* sp., in which *Strongyloides* sp. had the highest prevalence at 34%. Higher risk from polyparasitism recorded 18 unique cases across all sample livestock. This confirms that parasitic infections are progressive in the area and possibly occur in active transmission to other animals, including humans. Potential public health risks associated with poor animal hygiene emphasize the importance of proper animal farming management, routine deworming, clean water, and improved husbandry practices as a responsibility delegated among farmers, stakeholders, community veterinarians, local and national government in achieving Sustainable Development Goals 2,3, and 12.

Key Words: Infections; Trematode; Nematode; Protozoans; Farm Animal

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