

## THE ROLE OF PARASITIC INFECTIONS IN THE DEVELOPMENT OF RESPIRATORY DISEASES IN SWINE

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### Abstract

Metastrongylidosis is a parasitosis caused by several species of nematodes of the genus *Metastrongylus*. The development of parasites goes through transitional hosts - earthworms. Infection occurs when pigs eat infected worms so infections are most commonly found in organic production and extensive breeding. The pathological effect of parasites begins with their larvae migratory movement from the lung capillaries to the lung tissue, during migration through the lung tissue, during the stay and activity of adults in the bronchi and aspiration of parasite eggs into bronchioles and alveoli. This is followed by the toxic effect of metabolic products of the parasite, which after resorption in the blood can lead to general intoxication. The predilection place of parasites is the posterior parts of the diaphragmatic lobe - margo acutus and margo obtusus. Affected animals show signs of dyspnoea and frequent vesicular respiration. In addition to the direct pathological action of metastrongylide, they transmit several diseases of pigs of bacterial and viral etiology. Two species of these parasites, *Metastrongylus elongatus* and *Metastrongylus pudendotectus*, have been identified in Serbia. The prevalence of both species varies from region to region. In the north of Serbia (Vojvodina), the presence of *M. pudendotectus* dominates, while in central and southern Serbia, *M. elongatus* is much more common. In Serbia, in individual (semi-extensive and extensive) housing, infections are found in 34-52% of animals and in 1-3% of swine in farms.

**Key words:** *Metastrongylus spp.*, swine, respiratory diseases

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