

## Parasitological assessment of organic fertilizers used in agriculture in Poland in 2018–2020

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The sanitary safety of organic fertilizers used in agriculture is essential for the protection of public health. The aim of the research was to assess the parasitological contamination of organic fertilizers applying for admission to trading in Poland in 2018–2020. The research material consisted of 513 samples of organic fertilizers. The samples were tested with our own accredited methods. Live eggs of parasites of the genus *Ascaris*, *Toxocara* or *Trichuris* were found in a total of 119 samples (23.2%), including 37 samples from biogas plants, which constitutes 33.3% of contaminated samples of this type, 59 samples of fertilizers based on sewage sludge (42.0%) and 23 samples of other organic fertilizers (9.3%) from fertilizer production plants. The most contaminated with parasite eggs

were samples from municipal sewage treatment plants and biogas plants. Live *Ascaris* spp. Eggs were found in 78 samples, 53 samples of *Trichuris* spp. Eggs, and 48 samples of *Toxocara* spp. The total number of parasite eggs in these samples ranged from 300 to 750,000 eggs per kg DM. samples. The eggs of the genus *Ascaris* and *Toxocara* were the most numerous. The lowest number of live eggs of intestinal parasites was found in the samples of other organic fertilizers. The obtained results indicate the necessity to conduct parasitological tests of organic fertilizers before placing them on the market in order to eliminate potential threats to the environment and human and animal health.