

Trichinella proficiency testing in Southeastern European countries

Abstract

In some Southeastern European (SEE) countries, like Serbia, Romania, and Bulgaria, trichinellosis is one of the most important foodborne zoonotic diseases. In those countries, EU regulation and local authorities require the staff of laboratories performing official controls on meat to be properly trained and to check their competence by participating regularly in proficiency testing (PT). PTs are organized by National Reference Laboratories for Trichinella of each country and involve all official laboratories testing meat. In Romania and Bulgaria, the organization of PT for the detection of Trichinella larvae in meat by Magnetic Stirrer Method (MSM) started in 2012. In Croatia and Serbia PT was first organized in 2015 and 2017, respectively. This study presents data on the performance obtained by official laboratories of SEE countries that organize PT at national level and compares the performance obtained by laboratories belonging to different countries. Results suggest that the constant participation in PT leads to an increase in the performance of participating laboratories by positively affecting the staff accuracy in sample testing by MSM. Since the percentage of recovered larvae was in some cases suboptimal (<80%) and occasionally very poor (<40%), there is room for improvement. The regular participation in PT by laboratories involved in official controls on meat intended for human consumption is fundamental to guarantee consumer safety.