Clinical trials in swine and calves herds were performed using sulfamethoxazole and trimethoprim combination – “Trimerazinas Lux”. Before experiment pathogenic microorganisms (Salmonella enteritidis and E. coli K99) from calves were isolated and E. coli K88, Pseudomonas aeruginosa, Enterobacter cloacae and Proteus mirabilis were isolated from pigs. The control groups of pigs and calves equal in size were treated using commercial drug Trimerazin (Polfa, Poland). The results on antimicrobial effects revealed that “Trimerazin Lux” in vitro was most efficacious against Enterobacter cloacae (transparency zone – 22.5±1.4 mm), against Salm. choleraesuis (transparency zone – 20.4±1.2 mm), and against E.coli (transparency zone – 18.9±2.1 mm). Clinical trials showed that effectiveness of “Trimerazin Lux” in pigs was 100%, i.e. all pigs were recovered. Efficiency in control group was 96.6%, i.e. one pig in this group died. Preparations were also effective in treatment of salmonellosis and colibacillosis in calves. One calf from testing group (total 30 calves) died and two calves died in the control group. The efficiency of “Trimerazinas Lux” and “Trimerazin Polfa” was 96.6% and 93.3%, respectively. There were no statistical difference between groups. After treatment with “Trimerazinas Lux” no side effects were registered. According our results it was concluded that combination of sulphamethoxazole and trimethoprim – “Trimerazinas Lux” – is a safe and effective preparation for treatment of microorganisms diseases in pigs and calves.

Keywords: sulfamethoxazole, trimethoprim, trimerazin, pigs, calves.