

COMPARISON OF TWO COMMERCIAL DIAGNOSTIC KITS FOR ROTAVIRUS DETECTION IN DIARRHEIC FOALS

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Group A rotaviruses (RVA) are pathogens associated with diarrhea in young foals. **Purpose:** to compare the sensibility and specificity of two commercially available diagnostic kits for detection of equine RVA. **Methods:** One hundred and ninety stool samples, collected from young foals with diarrhea, were analyzed by ELISA Pathfinder (BioRad, Marnes-la-Coquette, France) and immunochromatographic *FASTest* ROTA Strip** (MEGACOR DIAGNOSTIK GmbH, A-6912 Hörbranz, Austria). All the samples were also tested by an in-house ELISA, and those showing discordant results were analyzed by RT-PCR targeting the RVA VP6 gene. A sample was considered “positive” when equine RVA was detected by two or more of the assays. **Results:** Based on these criteria, 48 stool samples tested as RVA positive and 142 as negative. ELISA Pathfinder detected 16 (33%) while *FASTest* ROTA Strip 44 (92%) equine RVA positive samples. According to ROC analysis, the sensibility and specificity for diagnosis of equine RVA were 95% and 92% for *FASTest* ROTA Strip, and 33% and 96% for ELISA Pathfinder, respectively. **Conclusions:** *FASTest* ROTA Strip is by far more suitable and efficient than ELISA Pathfinder in the screening of Rotavirus infection in young foals with diarrhea.