Serology testing for equine proliferative enteropathy using three different methods agreed well in weanling foals, the target age for *Lawsonia intracellularis* infection. Authors’ addresses: Veterinary Diagnostic Laboratory, College of Veterinary Medicine, University of Minnesota, St Paul, MN 55108 (Gebhart, Kelley, Chander); College of Veterinary Medicine, University of California, Davis, CA 95616 (Pusterla, Mapes, White); and Maxwell H. Gluck Equine Research Center, University of Kentucky, Lexington, KY 40546 (Page, Horohov); e-mail: gebha001@umn.edu. © 2012 AAEP.

1. Introduction
Currently used serologic methods for equine proliferative enteropathy (EPE) diagnosis, an immunoperoxidase monolayer assay (IPMA), a slide-based immunoperoxidase assay (SIPA), and an enzyme linked immunosorbent assay (ELISA), were compared using sera from different equine populations.

2. Materials and Methods
Sera were collected from 96 weanlings with suspected EPE, 117 clinically normal weanlings, and 116 clinically normal adult horses aged yearling to 27 years. Samples were blinded and independently analyzed by three laboratories that used the IPMA, SIPA, and ELISA, respectively. Sensitivities and specificities for each test, overall agreements between different tests, and correlations between titers for each equine population were calculated.

3. Results
The serology results with each method, whether from EPE-affected or normal weanlings, agreed with sensitivities of 95.8% to 98.8% and specificities of 93.1% to 100%. Overall agreements for EPE-affected and normal weanlings were 96% and 93%, respectively, with strong Pearson correlations of 0.81 and above for the titers. Agreements for healthy yearling through aged horses,
however, were 66% overall, with lower correlations of titers.

4. **Discussion**

Serologic assay results for EPE agreed well for the IPMA, SIPA, and ELISA methods when used with weanling samples. However, less agreement was observed in healthy aged horses, possibly due to increased background for these sera or due to higher baseline levels of *Lawsonia intracellularis* antibodies in the older population.

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