



# **PROCEEDINGS**

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**Robert P. Ellis, Editor**

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**The 88<sup>th</sup> Annual Meeting of the  
CRWAD is dedicated to**

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**Evaluation of a CPV-2 Fecal Parvovirus ELISA (SNAP Fecal Parvo Test ®) from IDEXX Laboratories. Laurie J. Larson, Mariela Quesada, Eiman Mukhtar, K. Krygowska, and Ronald D. Schultz, Department of Pathobiological Sciences, School of Veterinary Medicine, UW-Madison.**

Diagnosis of parvoviral diseases in dogs and cats is essential for treatment and to isolate animals shedding virus from susceptible contact animals. In the present study, the commercially available fecal diagnostic test (SNAP ® Canine Parvovirus Antigen Test kit from IDEXX Laboratories) was evaluated to demonstrate the value of the fecal ELISA as an aid in the diagnosis of parvovirus diseases in dogs and cats. Although frequently used in the field for the diagnosis of feline panleukopenia virus (FPV) this test has not been evaluated with known isolates of FPV. We also tested it with all the genotypes of CPV-2 (2a, 2b, 2c), since reports on detection of each of the genotypes have not been published using the test. CPV-2c has only recently (2004-2005) been introduced into the US, probably from Europe, where it has been since 2000-2001. This study was designed to answer questions on the frequency or likelihood of positive test results after vaccination with modified live CPV-2 or FPV vaccines. We also tested pups that were known to be parasitized with coccidia species as well as giardia to determine if intestinal parasitism would affect the shedding of virus after vaccination. Days and duration of viral shedding after experimental challenge of control dogs and cats was determined. This study demonstrated that the test is effective and useful as an aid in the diagnosis of parvoviral diseases in both cats and dogs. It was also demonstrated that this test rarely detected the attenuated vaccine parvovirus, due to the low level of virus shed in the feces, providing the user a level of confidence that a positive test result indicates the presence of pathogenic (wildtype) virus regardless of recent vaccination. We also demonstrated that the test detects FPV isolates from the 1960's through to the current isolates and all genotypes of CPV-2 were detected. Virus is shed sporadically and was present in samples as early as 3 days in dogs and 5 days in cats after challenge infection.

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