



Demonstrating Advancements in Biotechnology to Ranchers in Southern Utah: The Snap BVD Test

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Bovine Viral Diarrhea is an extremely contagious beef cattle virus and costly disease to the beef industry. BVD results in respiratory or digestive disease, weight loss, abortions, and production loss. BVD also weakens the immune response enabling other diseases to have a greater impact on the infected animal (Bagley et al., 2007). Standard BVD testing practices require taking an ear notch or serum sample, refrigeration and proper storage of the sample, and sending samples to a laboratory to be analyzed. Standard testing isn't practical for Southern Utah ranchers because of the time required for laboratory testing. Recently, manufacturers developed a new technology – The Snap BVD Test, which can provide accurate results in 20-25 minutes.



Figure 1. Taking an ear notch.

To perform the test, an ear notch sample (Figure 1) and the IDEXX Snap kit was required. After obtaining an ear notch from the sample animal it was placed in a serum (Figure 2) for at least 10 minutes but not longer than 60 minutes. Between each sample, the ear notcher was sanitized with alcohol and then rinsed with water (Figure 3). The serum was then transferred into the sample well (Figure 4) of the Snap device before being snapped (Figure 5). The results appeared on the Snap device approximately 5 to 10 minutes later. If a blue dot appeared the sample spot is negative and if two blue dots appeared the sample is positive.



Figure 2. Transferring serum to test tube.



Figure 3. Alcohol and water used for sanitizing.

The BVD testing kits and supplies cost \$4.69/hd (purchased May 2013). Profit loss due to this disease can be

as high as \$15-\$88 per head (Rood, et al. 2009). A negative BVD test is also beneficial when marketing calves. Producers can certify that their calves have been tested and are BVD negative, potentially increasing the market value.

Eight ranchers were interested in the Snap BVD Test and tested a total of 234 head of cattle. The ranches varied in size and were located in Kane, Garfield, and Washington counties. All of the tests performed in this study came back negative (Table 1).

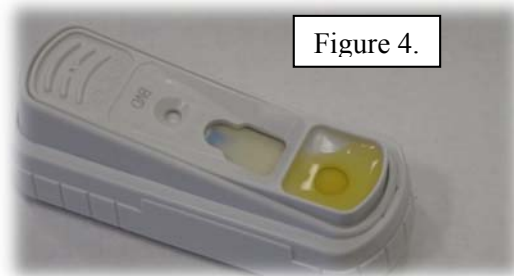


Figure 4.



Figure 6.



Figure 5.

Ranch ID #	Location	# Animals Tested	Results
Number 1	Kane County, Utah	7	Negative
Number 2	Kane County, Utah	35	Negative
Number 3	Kane County, Utah	17	Negative
Number 4	Washington Co., Utah	94	Negative
Number 5	Garfield County, Utah	9	Negative
Number 6	Kane County, Utah	44	Negative
Number 7	Kane County, Utah	18	Negative
Number 8	Kane County, Utah	12	Negative

No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.

References

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