

Pooling of Fecal Samples (5:1) Can Dramatically Cut Costs to Determine Johne's Herd Infection Status

As Low As \$1.79/Test

USDA Licensed - Approved for testing pools of up to 5 fecal samples

Negative VetAlert™ Johne's Real-Time PCR result is equivalent to a negative culture result

Herd Infection Status

100 cow dairy herd tested by sampling 20 pools of 5 fecal samples each:

Total cost to test herd = \$179

Effective cost per cow = \$1.79

Cost to Identify Individual Infected Cows in Positive Pools

	Percentage of Positive Pools						
	0%	5%	10%	15%	20%	25%	30%
Cost to test individual cows in positive pools	0	\$44.75	\$89.50	\$134.25	\$179	\$223.75	\$268.50
Total Cost	\$ 179	\$223.75	\$ 268.5	\$313.25	\$ 358	\$ 402.75	\$ 447.50
Pro-rated cost / cow	\$ 1.79	\$ 2.24	\$ 2.68	\$ 3.13	\$ 3.58	\$ 4.03	\$ 4.48

Example of cost savings: Based on list price of \$895 /kit (Johne's Combo-Pak; Cat. No. TC-9011-100)

PROTOCOL FOR POOLING OF BOVINE FECAL SAMPLES

To Pool Five Samples:

A. Process each sample according to MAP Extraction System protocol, Part I: Fecal Specimens, following steps 1-5, i.e.

Part I: Fecal Specimens

1. Transfer 2 grams (+/- 0.1g) of fecal material into a new 50mL conical tube.
2. Add 35mL of distilled water or 1 x TE to each fecal sample.
3. Vortex the sample for approximately 15 seconds (to break up large particles).
4. Rock the sample for 30 minutes at room temperature.
5. Incubate the sample at room temperature, without agitation, for 30 minutes (to allow larger particulate matter to settle to bottom of tube).

B. At step 6, remove 4mL from each of five samples and place together into a new 50mL conical tube. (The total volume in the 50mL conical tube will be 20mL; 4mL from each of 5 samples.)

C. Continue the extraction procedure with the centrifugation in step 7.

7. Centrifuge at 2500 x g for 10 minutes.
8. Using a serological pipet, carefully remove and discard the supernatant.
9. Resuspend the pellet with 1mL of 1 x TE.
10. Proceed to Part II: Lysis with either the Mini Beadbeater Protocol or the FastPrep Protocol.

ALTERNATE PROTOCOL FOR POOLING FECAL SAMPLES

To Pool Five Samples (prior to initiation of extraction procedure):

Homogenization by stirring:

1. Transfer 2 grams (+/- 0.1g) of each fecal sample to be pooled into a new 50mL conical tube (The total in the 50mL conical tube will be 10 grams, 2 grams from each of 5 samples.)
2. Mix samples by stirring with a sterile wooden stick.
3. Vortex samples vigorously for 10 to 15 seconds until the mixture appears homogeneous.
4. Remove 2 grams of the resulting mixture for processing according to the protocol for the MAP Extraction System.