State Stockman's Senior Team Problem

Team Number	Team Name

Scenario: You are a Katahdin producer in Southwest Virginia. You have 100 Katahdin ewes. You are considering using a terminal cross (TC) on 50 ewes instead of using purebreds (PB) for market lamb production. Lambs will be grazed for 90 days on a fescue based pasture and supplemented with a concentrate pellet. Compare the performance of terminal cross lambs vs. purebred lambs to increase profitability of your sheep enterprise. (Consider only 50 ewes used)

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pu	rebred lambs to increase p	profitability of your sh	neep enterprise. (Co	nsider only 50	ewes used)
As	sumptions:	TC Lambs	PB Lambs		
	Weaning Percentage:	170%	180%		
	Weaning weight:	55 lbs	50 lbs		
	Supplement rate:	3% body weight	3% body weight		
	ADG:	0.20 lb/day	0.13 lb/day		
	Death Loss:	6%	4%		
	Deworming %:	70%	40%		
				TC Lambs	PB Lambs
	1. How many lambs will	be weaned from eac	h breed group?		I
				<mark>85</mark>	<mark>90</mark>
	2. How many lambs will	be available to mark	et?		
	Round down to the no	earest whole number			
				<mark>79</mark>	<mark>86</mark>
	3. What will the lambs v	veigh at the end of th	e grazing season?		
Round weight to the nearest 0.1 lb.					
				<mark>73</mark>	<mark>61.7</mark>
	4. What will be the value	e of market ready lan	nbs per head (see ba	ick)?	
	 Assume lambs are ma 	arketed after the 90 d	lay grazing period		
				\$207.69	\$179.14
	5. What will be the total	value of marketed la	ambs?		
				\$16407.51	\$15406.04
	6. How many lambs will	be dewormed?			
Assume % of original population before death loss					
	 Round down to the no 			<mark>59</mark>	36
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	TC Lambs	PB Lambs			
7. What anthelmintic dosage (per head) would these lambs receive?					
 Assume average summer grazing weight 					
 Round anthelmintic dose to the nearest 0.1 ml 	<mark>5.8</mark>	<mark>5.1</mark>			
8. What is the cost of anthelmintic per head?	0.24	0.20			
9. What is the total cost of deworming?	0.34	0.30			
40.34/6-1	\$20.06	\$10.80			
10. What are the feed costs per head?					
Assume average summer grazing weight	\$25.92	\$22.68			
11. What are the total feed costs per breed group? (original popula	tion size)				
	\$2203.20	\$2041.20			
12. What is the net profit/loss per breed group?					
<mark>\$1</mark>	.4184.25	\$13354.04			
13. Should you utilize this crossbreeding system? Yes	No				

NDC 0010-3840-01

CYDECTIN®



(moxidectin) Oral Drench for Sheep



Antiparasitic

Contains 1 mg moxidectin/mL

For Treatment and Control of Infections Due to Internal Parasites of Sheep.

Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.

PRODUCT DESCRIPTION: CYDECTIN Oral Drench for Sheep is a ready-to-use solution containing 0.1% moxidectin. Moxidectin is an endectocide in the milbemycin chemical class which shares the distinctive mode of action characteristic of macrocyclic lactones. Moxidectin acts by interfering with chloride channel-mediated neurotransmission in the parasite. This results in paralysis and elimination of the parasite.

INDICATIONS: CYDECTIN Oral Drench for Sheep, when administered at the recommended dose level of 0.2 mg moxidectin/2.2 lb (0.2 mg/kg) body weight, is effective in the treatment and control of adult and larval (L4) stages of the following internal parasites of sheep:

Parasites

Haemonchus contortus - Adult and L₄
Teladorsagia circumcincta - Adult and L₄
Teladorsagia trifurcata - Adult and L₄
Trichostrongylus axei - Adult and L₄
Trichostrongylus colubriformis - Adult and L₄
Trichostrongylus vitrinus - Adult and L₄
Cooperia curticei - Adult and L₄

Cooperia oncophora - Adult and L₄
Desophagostomum columbianum - Adult and L₄
Desophagostomum venulosum - Adult and L₄
Nematodirus battus - Adult and L₄
Nematodirus filicollis - Adult and L₄
Nematodirus spathiger - Adult and L₄

ADMINISTRATION: CYDECTIN Oral Drench is ready-to-use. Administer 1 mL per 11 lb (1 mL per 5 kg) body weight into the mouth of the sheep, using any standard drenching equipment. Check dose rates and equipment before drenching. Do not overdose. Do not mix with any other products before administration. Avoid contaminating the drench solution. NADA 141-247, Approved by FDA



10480

Supplemental Price Information

Feed

1 ton

\$300

Anthelmintic

4000 mL bottle \$234.95

Slaughter Lambs Wooled and Shorn Choice 1 and 2			
Weight Range (lbs)	Average Price (cwt)		
40-50	315.25		
50-60	306.15		
60-70	290.34		
70-80	284.51		
80-90	272.09		