

nutrition, and pointed out that the type of litter used would influence its value. Fuller (1965) reported that hydrolyzed poultry manure was a good source of "unidentified factor" for practical broiler feeds. Since dried citrus pulp is a feedstuff of relatively high nutritive value (Ammerman et al, 1963; Peacock & Kirk, 1959) it appeared that if it were to be used as poultry litter, its feeding value could best be utilized by feeding the litter to ruminants. Therefore, this experiment was conducted to determine the digestibility of poultry litter containing dried citrus pulp.

Experimental Procedure

The poultry litter used in this experiment was obtained from chicks fed in Experiment 1. At the end of the eight-week feeding period the litter was removed from the pens, dried to prevent spoilage, and stored for the lamb feeding test.

A conventional digestibility and nitrogen balance study was conducted using three yearling Florida native wethers averaging 100 pounds in bodyweight. They were used in a three x three latin square design having been randomly assigned to treatment in period one. The preliminary feeding time prior to fecal and urine collections was 21 days, and the collection period was seven days. The animals were placed in metabolism crates two days before starting the collections. Two diets containing either 65% poultry litter (which included citrus pulp) or citrus pulp were fed. A third diet, referred to as "Basal Mixture," contained hay, corn meal, and soybean meal in a similar proportion to that of the other two diets and was used so that digestion coefficients could be calculated "by difference"

Table 5: Composition of Diets

	Diets		
	Chicken Litter	Citrus Pulp	Basal Mixture
		(lbs/cwt)	
Chicken litter	65.00	—	—
Dried citrus pulp	—	65.00	—
Bermudagrass hay (ground)	15.00	15.00	47.50
Corn meal	12.00	12.00	38.00
Soybean meal (50% protein)	3.00	3.00	9.50
Corn oil ¹	3.00	3.00	3.00
Salt, trace mineralized ²	1.00	1.00	1.00
Defluorinated phosphate	1.00	1.00	1.00
Vitamins A, D, and E ³	+	+	+

¹Santoquin added at 0.125% of total diet.

²The Carey Salt Co., Hutchinson, Kan. Listed minimum analysis in per cent:

Fe 0.27, Mn 0.25, Cu 0.033, Co 0.01, Zn 0.005, I

³2000 I.U. vitamin A palmitate, 270 I.U. vitamin D₃ and 5 mg DL alpha-tocopherol added per pound of diet.