

CALCULATING NUTRIENT VALUE OF POULTRY LITTER

1. Nitrogen - based on urea (46-0-0), or based on ammonium nitrate (34-0-0):		
per ton urea ÷ 920 lb N per ton urea = $per lb of N$		
OR		
per ton ammonium nitrate ÷ 680 lb N / ton = $per lb of N$		
2. Phosphorus - based on diammonium phosphate (DAP, 18-46-0)		
(a) DAP contains 360 lb of N per ton, so credit N contribution first:		
360 lb x \$ per lb of N (from above) = \$ value of N per ton of 18-46-0		
(b) $\ \ \ \ \ \ \ \ \ \ \ \ \ $		
(c) $\$ value of P_2O_5 per ton $18-46-0 \div 920$ lb P_2O_5 per ton $= $ \$ per lb P_2O_5		
3. Potash - based on 0-0-60		
$per ton 0-0-60 \div 1200 lb K_2O per ton = $ per lb K_2O		

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LITTER ANALYSIS FROM LAB:

(pounds per ton, "as is" or "wet" basis)	
Total N: lb per ton of litter x 70% available* = lb available N position *Estimated total availability within 2-3 years of surface application. If litter is incorporated, 80 be counted as available. Availability in same season of application may be as low as 50%.	er ton litter -90% of total N can
P ₂ O ₅ : lb per ton of litter	
K ₂ O: lb per ton of litter	
VALUE OF LITTER:	
N: lb available N per ton x \$ per lb commercial N	= \$
	+
P: lb P_2O_5 per ton x \$ per lb commercial P_2O_5	= \$
	+
K: lb K_2O per ton x \$ per lb commercial K_2O	= \$
TOTAL NUTRIENT VALUE PER TON OF LITTER	\$

Note: Preliminary estimates suggest a liming value for poultry litter of \$2 or more per ton, due to Calcium, Magnesium and Potassium contents. There may be additional benefits from organic matter improvements to soil, but these are difficult to quantify. All estimates of economic value apply **only** to factors that are **deficient** in soil where litter is applied