

LUPINS



PRODUCT DESCRIPTION

Lupins are a legume grown predominantly in Western Australia, South Australia, Victoria and New South Wales for stock feed. Lupins can be fed as a part of a balanced diet to all animals.

There are two basic types of lupins, bitter and sweet varieties. The ones currently grown commercially as a stock feed in Australia are the sweet types of the narrow leafed lupin (*L. angustifolius*) which has the cultivars Merrit, Gungurru, Warrah, Yorrel and Danj and the white lupin (*L. albus*) which has the cultivars Ultra, Hamburg, Kiev and Neuland.

DIRECTIONS FOR USE

- Crushed, untreated lupin seed of sweet varieties can be included in diets of pigs, poultry, ruminants and horses of all ages.
- Broiler diets containing lupins as the sole protein concentrate can be fed without any adverse effects provided that the lysine and methionine levels are maintained.
- Similarly, lupins have been shown to be able to replace half of the meat meal used in layer diets without any adverse effect on layer performance. In one study lupins were included at up to 20 percent of the layer diet without any harmful effect on performance.
- In pigs, lupin seed has been found to be as good a source of protein as meat meal or soybean meal when comparisons have been made on the basis of equal contributions of lysine.

SUGGESTED MAXIMUM INCLUSION RATES IN TOTAL RATION

SPECIES	INCLUSION RATES
PIGS	
Starter	5%
Grower	15%
Finisher	25%
Breeder	10%
POULTRY	
Layer	10%
Broiler	10%
CATTLE AND SHEEP	20%
HORSE	20%

LIMITATIONS

- No limitation on the inclusion of sweet varieties.
- As there is no simple method of detecting the alkaloid contents of lupin seeds, it is important that only lupins known to be grown from certified sweet seed be used as livestock feed.
- Manganese accumulation of white lupins may limit the level of inclusion.
- The bitter strains of lupins contain up to 2.0 percent of an alkaloid, which is highly toxic to pigs and poultry. The certified varieties of sweet lupins grown in Australia contain only traces (less than 0.05 percent) of alkaloid and are both safe and palatable to livestock without any form of heat treatment.

REF: (Evans. M, 1985)

TYPICAL NUTRITIONAL ANALYSIS

PROTEIN	%	MIN:	28.00
CALCIUM	%	MIN:	0.20
PHOSPHORUS	%	MIN:	0.30
LYSINE	%	MIN:	1.30
METHIONINE	%	MIN:	0.17
FIBRE	%	MIN:	11.00
FAT	%	MIN:	5.00
ME POULTRY	MJ/kg	:	9.30
DE PIG	MJ/kg	:	14.20
ME RUMINANT	MJ/kg	:	13.00
DE HORSE	MJ/kg	:	13.00

WARNING

NOT FOR HUMAN CONSUMPTION.

Seek nutritional advice to use this ingredient as part of a balanced diet.

STORAGE

[Cool, shaded, dry conditions, away from vermin.](#)

PACK SIZE

20kg woven polypropylene bags.