

The Pigeonpea Plant

MG Mula

Presented during the 1st International Training Course on 'Pigeonpea Improvement and Seed Production' ICRISAT, Patancheru 502 324, Andhra Pradesh, India 7-12 November 2011

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Nutritional composition of green and mature pigeonpea seed on a dry-weight basis

Particulars	Green Seed	Mature Seed	
Protein (%) Protein digestibility (%) Trypsin inhibitor (units/mg)	21.0 66.8 2.8	18.8 58.5 9.9	
Starch (%) Starch digestibility Amylase inhibitor (units/mg)	44.8 53.0 17.3	53.0 36.2 26.9	
Soluble sugars	5.1	3.1	
Flatulence factors (g/100g sol. sugar)	10.3	53.5	
Crude fiber (%)	8.2	6.6	
Fat (%)	2.3	1.9	
Minerals and trace elements (mg/100g) Calcium Magnesium Copper Iron Zinc	94.6 113.7 1.4 4.6 2.5	120.8 122.0 1.3 3.9 2.3	



Nutritional component of fresh green forage, dried and ground whole plant forage, seeds, silage of pigeonpea

Nutritional	Fresh	Dried/	Seeds	Seed	Leaves	Silage
constituent	green	Ground		coat		
	forage	Forage				
Moisture (%)	70.4	11.2	10.3			66.7
Crude Protein (%)	7.1	14.8	18.36	4.9	11.46	15.09
Crude Fiber (%)	10.7	28.9	5.43	31.9	22.6	26.05
N-free extract (%)	7.9	39.9				32.8
Fat (%)	1.6	1.7		0.3		
Ash (%)	2.3	3.5		3.5		



ICRISAT Science with a human face

Dish









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Food ... continuation

Noodles



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Food ... continuation

Baked products (pastries and cakes)









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Food ... continuation

snacks



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Frozen and Canned Green Peas









Wine and Beverages









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Animal Feed, Fodder and Forage

Feeds









Animal ... continuation



Fodder









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Animal ... continuation

Forage





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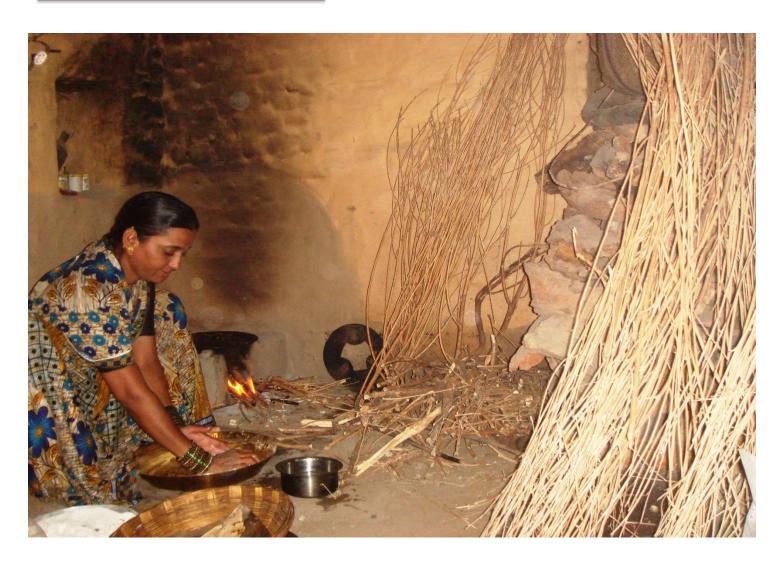
Soil Amelioration



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Fuel Wood



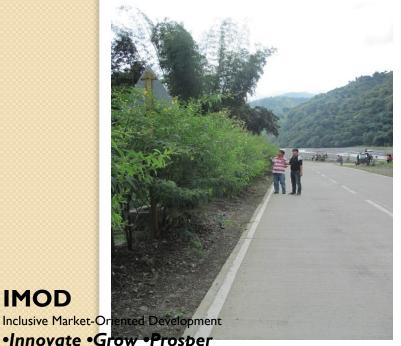
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Soil Conservation Mechanism









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Other Benefits



Lac production







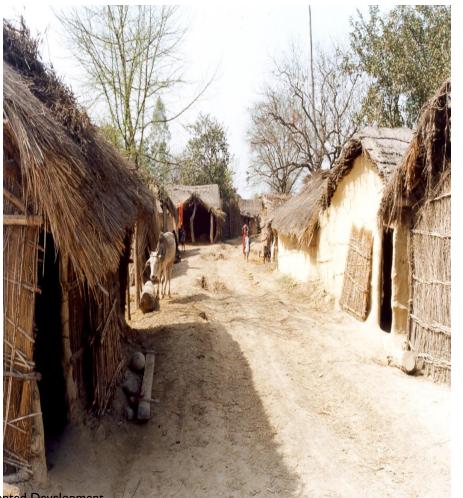
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Others .. continuation

Light construction materials







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Folk medicine

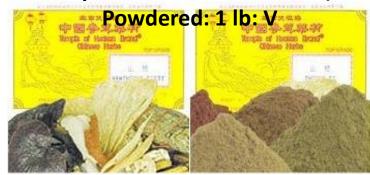
In vivo evaluation of the antiviral activity of Cajanus cajan on measles virus

(UU Nwodo, AA Ngene, CU Iroegbu, OAL Onyedikachi, VN Chigor, AI Okoh) Pigeon Pea Root (Sophora subprostrata; Shan Dou Gen) 5:1 Extract Powder 100



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Pigeon Pea Root (Sophora subprostrata; Shan Dou Gen)



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Others ... continuation

Fence



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Others ... continuation

Substrate for mushroom production





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Others ... continuation

Honey production



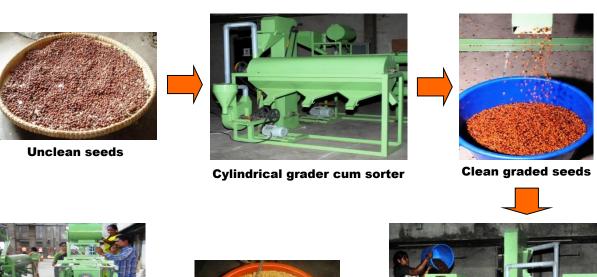


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How is Dal Processed?





Polisher

Split dal

Double roller mini dal mill



Finished product

Dal Recovery

Total pigeonpea dal – 75 to 80 % First quality dal – 60 to 65 % Second quality dal – 15 to 20 %



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Innovate •Grow •Prosper

