Acacia colei, a multi-purpose Australian Acacia for Africa’s Drylands

*Acacia colei* is a multi-purpose tree from the arid and semi-arid tropical region of Australia. It is well adapted to harsh semi-arid conditions with highly variable annual rainfall of 350-800 mm and grows well in a range of soil types, especially poor sandy soils. It is a pioneer species which establishes well in tree nurseries and when planted out can growth to 3-4 m in two years. It produces good quantities of safe, nutritious seed (~2 kg/tree/yr.) which is high in protein (21-23%), carbohydrate (50%), fat (7%) and fibre. When the seeds are ground into flour they can be mixed with cereal grains and incorporated into a range of local foods. Flowering and seed production is enhanced through pruning/coppicing which also produces large amounts of sustainable fuel wood and improves tree longevity. *A. colei* can also play a vital role in the restoration of degraded land, produce mulch for soil amelioration, fix nitrogen, give sustainable fuel wood and timber and is well adapted to Agroforestry farming systems.
A. colei var. ileocarpa seed pods

A. colei var. colei seed pods

A. colei seed pods at harvest

A. colei seed.
Benefits & Uses

Reclamation of degraded lands

A.colei a pioneer spp. for land reclamation in NW Niger (300-350 mm rainfall)

Windbreak on farm borders

A.colei & A.torulosa as farm border trees, Maradi, Niger
Seed for human/animal food

A. colei seed

A. colei flour (25%) mixed with cereals

Village Acacia food demonstration

Baby weaning formula with 15% Acacia flour
Sustainable fuel wood, timber

*A.colei* pruned for poles (4 yrs.)

Fuel wood from *A. colei* (3 yrs.)

*A.colei* pole production (4-5 yrs.)

Regrowth after pruning (4 weeks). Sustainable wood production
Mulch & Compost

Mulch from *A. colei* prunings increases organic matter/soil fertility.

Termites compost *A. colei* leaves and incorporate in soil.
Agroforestry farming systems

*A. cole* intercropped with Sorghum. Farmer Managed Agroforestry Farming System (FMAFS)

Village FMAFS. *A. cole* & *A. torulosa*, Maradi, Niger