NORTH QUEENSLAND TROPICAL SEEDS

North Queensland Tropical Seeds specialises in the production, grading, processing and wholesaling of premium quality tropical pasture seeds, legumes and grains. It prides itself in consistently supplying the sugar, dairy and grazing industries with the best quality legume and pasture seeds every season. The proprietors have supplied seed to these industries for over 25 years and are the main supplier of Cowpea, Dolichos Lab Lab and Soybean to the sugar industry.

North Queensland Tropical seeds is a wholesale supplier, selling seed to both the domestic market and to clients for the export market.

NQTS' premises is AQIS registered (Premises No 4053) which allows for the full preparation and treatment of seed for the export market.

As a wholesale business it does not sell direct to growers but deals with resellers and seed companies throughout Australia.

www.nqtropicalseeds.com.au

Sugar Legumes

COWPEA

North Queensland Tropical Seeds supplies Meringa, Ebony and Caloona Cowpea seed to the sugar industry. Cowpea has been used as a green manure crop in the sugar growing areas for many years. Although, it has been traditionally broadcast, cowpea will give far better results if planted in hilled up rows and a pre-emergent herbicide used for weed control. Average seed count is approx 12000seeds/kg

MERINGA

A long season type suited to grazing or green manuring. It varies in colour from light tan to brown seed. Performs well in good drained soil and is commonly used in the northern sugar belt.

EBONY

A grazing and green manure type marketed under PBR by Heritage Seeds. Especially suited to coastal high rainfall area or irrigation suitable for dairy farms and cane rotation. Phythphora resistant. NQTS grows Ebony Cowpea under contract for Heritage Seeds.

RED CALOONA

A small seeded dual purpose legume suitable for grazing, green manuring or grain production. Medium quick maturity. Moderately resistant to phytophthora stem rot.

PLANTING RATE FOR COWPEA

Planted in rows the recommended seeding rate is approx. **20kg/ha**
Broadcasting the recommended planting rate is approx **35kg/ha**

Cowpea is an annual legume which can be used for fodder or grain production as well as a green manure crop. Cowpea is adapted to a wide range of soils provided they are well drained. The crop does not tolerate prolonged periods in water logged soil .

INOCULATING COWPEA

If cowpea has not previously been planted in the proposed paddock, inoculation is essential to ensure that the crop nodulates and produces its own nitrogen. One packet of inoculant will coat 100kg of seed. Instructions for application are printed on the packet.

Group I inoculant should be used for cowpea.

DOLICHOS LAB LAB

North Queensland Tropical Seeds has available two cultivars Rongai and Highworth which are grown extensively as a cattle fodder, hay crop, cover and rotational crop and a fallow crop which adds fertility and organic matter to the soil.

RONGAI DOLICHOS

Brown seeded, white flowering variety, which is the later flowering cultivar. It will continue to grow during flowering, which usually occurs in June.

HIGHWORTH DOLICHOS

Black seeded, purple flowered variety which is early maturing. It usually commences flowering in April and tends to cease growing when this occurs.
With good growing conditions LabLab covers the ground rapidly and produces a large twining mass, smothering most weeds. Row planted crops can be cultivated in the early stages for weed control. When using Lablab as a green manure fallow it is important that the crop is incorporated into the soil prior to it setting seed. If left to seed this may germinate in the following crop which may create problems

PLANTING RATE FOR DOLICHOS LABLAB

If row planting the recommended seeding rate is approx. **20kg/ha**
If broadcasting the recommended planting rate is approx **35kg/ha**

INOCULATING DOLICHOS LABLAB

If Dolichos Lablab has not previously been planted in the proposed paddock, inoculation is essential to ensure the crop nodulates and produces its own nitrogen. One packet of inoculant will coat 100kgof seed. Instructions for application are printed on the packet.

Group J inoculant should be used for Lablab

Sugar Legumes

SOYBEAN

The two varieties bred for North Queensland are Leichardt and Stuart. Soybean are an excellent legume as a green manure crop but can also be grown through to grain for crushing or the edible market. Good quality grain is sort after by the market place. NQTS produces both varieties and has them available from June each year. It is important that growers source seed which has high germination and has been stored in appropriate condition to preserve the quality of the planting seed. NQTS stores all their seed in purposely built storage.

LEICHARDT

This variety is the most popular for green manure especially by sugar growers in North Queensland.

It was introduced to the sugar growing areas as an alternative to other legumes for its ability to tolerate water logging, it produces more dry matter, fixes more nitrogen and produces greater benefits to the following sugarcane crops. Leichardt has a dark hylum and it has an average maturity of 135 days and although it can be grown through to grain preference is given to light hylum varieties.

STUART

Stuart is the first light hylum variety bred for coastal and tropical areas. Although some growers produce Stuart as a green manure it is mostly grown for grain production as it may be suitable for some human consumption markets. It's benefits are that it has resistance to current strains of soybean rust and is much more resistant to most root nematodes than other varieties.

For best results soybean should be planted in rows and pre-emergent used for weed control. Planting depth for soybeans is critical for germination. Seed should be planted between 25 – 50 mm. If soybean seed is planted too deep or into too dry condition germination may be affected and result in a poor strike.

PLANTING RATE

An average seed rate required is between 250,000 to 300,000 plants per hectare.

NQTS labels all soybean seed with a seed count for quick calibration on the number of kg/ha growers require to meet the recommended planting rate. An average is approx. 50kg/ha.

INOCULATING SOYBEAN

If soybean has not previously been planted in the proposed paddock, inoculation is essential to ensure that the crop nodulates and produces its own nitrogen. One packet of inoculant will coat 100kg of seed. Instructions for application are printed on the packet.

Group H inoculant should be used for soybean.

POTENTIAL NITROGEN CONTRIBUTIONS USING LEGUME FALLOWS

The following information has been compiled from a number of trials over a period of time by the Yield Decline Joint Venture Project and should be used as a guide. It represents the approximate nitrogen values of different legume crops planted in fallows. The heavier the legume crop the more nitrogen contribution to the soil.

CANE CROP NEEDS ABOUT 120-150Ka/Ha OF NITROGEN

LEGUME CROP	FALLOW CROP DRY MASS T/HA	N %	TOTAL N CONTRIBUTION Kg N/Ha	N CONTRIBUTION IF GRAIN IS HARVESTED Kg N/Ha
SOYBEAN	8	3.5	360	120
	6		270	90
	4		180	60
	2		90	30
PEANUTS	8	3		125
	6		N/A	100
	4			65
	2			25
COWPEA	8	2.8	290	100
	6		220	75
	4		145	50
	2		70	25
LABLAB	8	2.3	240	80
	6		180	60
	4		120	40
	2		60	20

Grazing Legumes

GLYCINE

Glycine is a deep-rooting plant producing long, slender, branched and trailing stems. It is a legume that combines well with tall grasses like gatton or green panic. It grows mainly in summer, but is more tolerant of cold than many other tropical legumes. Glycine/panic pastures are usually grazed lightly in the first year as the grasses compete for the phosphorus available. A glycine/panic pastures have been used to restore fertility of red soils on the Tablelands.

NQTS produces two cultivars of glycine, Tinaroo and Coopers.

TINAROO

Tinaroo Glycine has been used extensively in the dairy industry on the Tablelands. It grows well throughout summer, autumn and early winter and does not commence flowering until mid June. It is used in the more humid areas as it grows for longer. It has soft, thin leaves which are bright green in colour.

COOPERS

Coppers Glycine flowers in early May. As it holds leaf better in cool conditions, Cooper can be grown further inland and has performed well on more fertile soils in higher rainfall sub coastal areas of southern Queensland. It has a large coarser leaf and longer internodes. It has a dull green colour

Grazing Legumes

GREENLEAF DESMODIUM

Greenleaf Desmodium is a course, trailing legume with a deep tap root and thick stems which root down well at the nodes. The leaves have a brown to purple flecking on the upper surface of the leaves. It combines well with tall grasses like panics and has a good nutritional value. It is well accepted by stock and is a perennial.
Greeneleaf Desmodium needs moderately fertile soils, but is quite versatile as long as fertiliser is applied. It responds well to superphosphate. It can tolerate acid conditions and tolerates certain degrees of waterlogging but will start to drop leaves in dry weather. It flowers in early winter and produces a mass of purple flowers which make an attractive show.

SECA STYLO

Seca is a hardy legume ideal for extensive grazing. It is relatively easy to establish, leafy into autumn and tolerates bouts of dry weather as has a deep tap root. It will grow on a wide range of soils but performs better in dryer conditions. It does not tolerate water logging soils. It is able to be grazed throughout the year. The feed value of the leaf and flower heads is high, and is well maintained into the dry season.

BeefMaker Stylo ™

Stylo is a high production BeefMaker Stylo™ new to the Australian Market. It has been specifically bred for premium quality tropical hay production, but it is flexible enough to be grazed straight from the paddock.
It is extremely drought tolerant. It contains a Multi-Gene Resistance to Anthracnose, keeping the forage quality consistently high through any growth stage. Retains leaf right to the crown even very late in its maturity. It is extremely soft to touch in the paddock or in the bale. Will grow to heights of 1.5 metres and is extremely dense, forage yields are excellent. Is late flowering and is the ultimate hay variety in tropical regions. **Planting rate 8-10kg/hectare.** NQTS grows BeefMaker Stylo™ under contract for Australian Premium Seeds.

BeefBuilder Stylo ™

BeefBuilder Stylo™ is a high production, high quality introductions to the Australian hay and grazing market. Ease of management sets it apart from all other varieties currently available to farmers chasing premium quality feed or hay.
Is an early flowering variety, making it the preferred option for grazing or opportune hay production in the tropics. Contains a Multi-Gene resistance to Anthracnose, keeping the plant disease free and maintaining feed quality at any growth stage. Shows excellent early seedling vigour and is quick to first grazing. Has an erect to semi-erect growth habit, making for headache free hay production. Has excellent leaf retention. Produces a bulk of extremely high quality forage under tropical conditions. **Planting rate: 8-10kg/hectare.** NQTS grows BeefBuilder Stylo™ under contract for Australian Premium Seeds.

Pasture Grasses

SIGNAL GRASS (UROCHLOA BRACI DECUMBENS)

Signal grass referred to as Braci is a trailing perennial which will tolerate heavy grazing. It will perform in a wide range of soils but does not cope with water logged country. It is a very dense pasture so does not mix too well with legumes but its dense cover gives a relatively weed free pasture.
Braci adapts well to the humid and sub humid areas but also grows well in the coastal subtropics showing some tolerance to signs of drought and cold

RHODES GRASS

Rhodes grass is a tufted perennial grass with runners which is suitable to the sub tropics.It forms strong bunch-type stools and sends out runners establishing roots at the nodes which allows for quick establishment. It has a vigorous root system which gives it a degree of drought resistance but performs well in areas where annual rainfall falls between 600 – 1000 mm. It has been known to have some resistance to frost but predominantly it is a summer growing pasture.
Rhodes grass will establish well in a wide range of soils but is difficult to establish in heavy cracking soils. It has a tolerance to salt, combines well with many legumes and is fast growing which makes it suitable for erosion control.

KATAMBORA
Is a fine leafed variety which is well suited to hay production as well as grazing. It is a mid-flowering variety with excellent stool establishment. It has a degree of cool – tolerance and shoots early in spring compared to Callide
The Tableland is a large producer of Katambora Rhodes which is sold for seed into the middle east for hay production. Large volumes of hay are sold throughout the Tablelands during September and November.
CALLIDE
Is a vigorous growing Rhodes which is late flowering and remains leafy and palatable into Autumn. While more vigorous than Katambora , it demands a higher fertility and may not persist as well on low fertility soils. It tends to be a courser grass to other Rhodes and therefore is not a preferred variety for hay production.

SETARIA

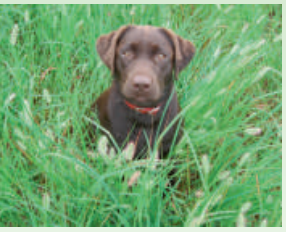
Setarias are suited for subtropical areas and grow in higher rainfall coastal district. They are the most cold tolerant of all the tropical grasses and are suitable for grazing.
There are five varieties produced for seed on the Tablelands : Nandi, Solander, Narok , Kazungula and Splenda.
NQTS produces Splenda under contract to Heritage Seeds.

Wheat

WHEAT - Hartog

NQTS produces wheat each season in rotation with soybeans. It establishes well on the red soils of the Tablelands but is planted heavier than in the southern areas of the country as it does not tiller as well in the sub-tropics due to the mild winter temperatures
It grows exceptionally well under irrigation producing some 5-6 tonne of seed per hectare.

Pigeon Grass



PIGEON GRASS

Is a low growing native which is used predominantly for road side re- establishment.

All seed supplied by North Queensland Tropical Seeds is packed in 25kg bags except for Rhodes grass which is available in either 10 or 20 kg bags. Seed is labeled with Minimum purity and Minimum germination . A full seed test is available from your local seed supplier.

Seed count for soybean are printed on the label of each bag. Seed counts for other legumes is available on request.

SEED MUST BE KEPT IN A COOL, DRY ENVIRONMENT AND FREE FROM ANY INSECT OR RODENT INCURSION UNTIL PLANTED.

SEED IS A LIVING THING AND MUST BE TREATED ACCORDINGLY.

If bags are dropped, mishandled or stored in hot humid conditions prior to planting the germination of the seed may be affected.

Harvesting

When harvesting legumes care must be taken not to damage seed. NQTS uses a CASE 2388 Rotary Harvester to ensure that the seed is not split or knocked around during harvesting.

Grading

NQTS has commissioned a new state of the art seed grading plant which will increase productivity and fine tune the cleaning of all seeds. The Petkus M 15 3.6 is the latest machine in the range, imported from Germany. NQTS can now grade, size and process legumes, grasses and grains with the greatest of ease.

Storage

It is essential that all seed is well stored and protected from insects and rodents. North Queensland Tropical seeds has specialised seed storage facilities including a seed cold room which are AQIS Registered, the aim is to maximize quality prior to dispatch. Growers can order their seed early in the season from their seed supplier and North Queensland Tropical Seeds will store the seed until it is need for planting. This ensures that the industry gets the best possible planting seed

Growers are encouraged to place their orders with their supplier early in the season to avoid missing out as stocks sell quickly

For more information or suppliers in your district phone:
(07) 4093 3743 / 0409 637 044
www.nqtropicalseeds.com.au

Available From:

REFERENCE - The above information may be derived in part from the following source:
Partridge, IJ (1998)Revised(2003). A Guide to Better Pastures for the Tropics and Subtropics, NSW Agriculture, Paterson.