

EXKPLUM – KAKADU PLUM POWDER

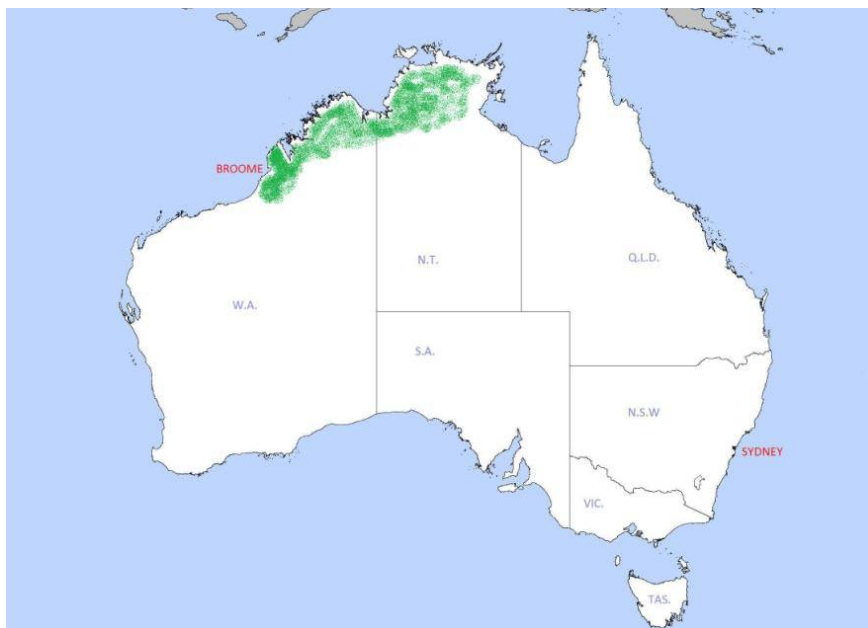
Terminalia ferdinandiana

Australia's own natural source of vitamin C

Habitat

The Kakadu plum (*Terminalia ferdinandiana*) is found in an area in Australia ranging from south of Broome in Western Australia (WA), up through the coastal and inland areas of northern WA through to the Northern Territory, to Arnhem Land and the Gulf area in the east of Northern Territory. It is known by various names such as Arangal, Gabiny (Yawuru people), Gubinge (Bardi people north of and around Broome), Kabinyn (Nyul Nyul), Madoorr (Bardi people near One Arm Point - Dampier peninsular), Manmohban (Kune language in Maningrida area), Mi-marl-arl (Wadeye) and Murunga (Eastern Arnhem Land) and has also been called Billygoat plum, Green plum and bush plum.

Kakadu plum grows in sandy soil in which other plants struggle to survive. Trees can bear fruit when they are 5 to 6 years old. The trees are plentiful in the wild and it is relatively free from attack by insects and other animals. In some areas the trees have two fruiting seasons per year: December to February then around April.



Shaded area indicates habitat of *Terminalia ferdinandiana*

Benefits for remote indigenous communities

Our suppliers operations comply with various government policies and are carried out with the full permission of indigenous groups. Directors attend numerous workshops with indigenous bodies and tertiary institutions in WA and the NT.

Indigenous families and communities are responsible for the management of the picking, collection and packaging of the fresh fruit. Fruit is harvested during the hot monsoon season and frozen before transport; which can be a problem when remote areas are cut off by flood waters. Funds received by communities are invested in their future. Communities are establishing “enrichment plantations”; a result of research being conducted at Broome TAFE college, which increases yield in the plant’s natural habitat without the need for land clearing and monoculture.

Kakadu plum powder is wild harvested, is GMO free and does not contain products derived from animals. Organic certification is pending.



Features and commercial applications for Kakadu plum

Although it has been known for some time that the Kakadu plum is probably the world’s richest source of vitamin C, it had never been commercially managed on a large scale. Small amounts were being purchased for inclusion in gourmet food products, but there was increased interest to see if it could be processed into a fine dry powder that would meet pharmaceutical grade specifications.

There were several challenges to be addressed. The flesh clings to the seed (which is roughly the same size as an olive pip). Any method of removing the flesh from the seed had to take into account the volatile nature of vitamin C which is readily destroyed by heat, which is generated in most methods of processing. Our supplier has subsequently developed the patented method and the machinery to separate the flesh and skin of the plum from the seed, and further process this to a stable, dry powder with minimum loss of vitamin C.

Vitamin C is the most commonly used of the vitamins with industry estimates of 110,000 tonnes produced annually, however practically all of the vitamin C used in products is produced synthetically. Consumers are demanding natural sources of nutrients, but the most commonly used natural sources of vitamin C, being rose hips and acerola cherry, have around 50% of the vitamin C content of the Kakadu plum.

Kakadu plum is also high in dietary fibre and has an excellent Oxygen Radical Absorbance Capacity or ORAC (antioxidant) value, higher than goji berries, green tea and blueberries.

Kakadu plum can be used as an ingredient in dietary supplements and complementary medicines, foods and beverages and cosmetics.



Specification

Botanical name	<i>Terminalia ferdinandiana</i>
Source	Wild harvested by indigenous communities in the Kimberley region of Western Australia; and the Northern Territory, Australia
Plant part used	Fruit flesh and skin without seed
Type of preparation	Dry powder
Fresh fruit to dry powder ratio	Approximately 10:1
Storage	Refrigerated below 4oC
General appearance	pale greenish-yellow to amber powder
Organoleptic properties	Slight plant odour. Slight acidic taste followed by a slight bitterness

Kakadu Plum Powder – typical composition of vitamin C content with other sources

The following table is approximate and shows the relative abundance in different raw plant sources. The amount is given in milligrams per 100 grams of fruit or vegetable and is a rounded average from multiple authoritative sources: (source: Wikipedia)

Kakadu plum - 3150	Orange - 50	Plum - 10
Camu Camu - 2800	Lemon - 40	Watermelon - 10
Rose hip - 2000	Melon, cantaloupe (rockmelon) – 40	Banana - 9
Acerola - 1600	Cauliflower - 40	Carrot - 9
Amla - 720	Grapefruit - 30	Avocado - 8
Jujube - 500	Raspberry - 30	Crabapple - 8
Baobab - 400	Tangerine - 30	Cherry - 7
Blackcurrant - 200	Mandarin orange - 30	Peach - 7
Red pepper - 190	Passion fruit - 30	Apple - 6
Parsley - 130	Spinach - 30	Blackberry - 6
Seabuckthorn - 120	Cabbage, raw green - 30	Beetroot - 5
Guava - 100	Lime - 20	Pear - 4
Kiwifruit - 90	Mango - 20	Lettuce - 4
Broccoli - 90	Potato - 20	Cucumber - 3
Loganberry - 80	Melon, honeydew - 20	Eggplant - 2
Redcurrant - 80	Mango - 16	Fig - 2
Brussels sprouts - 80	Tomato - 10	Bilberry - 1
Lychee - 70	Blueberry - 10	Horned melon - 0.5
Cloudberry - 60	Pineapple - 10	Medlar - 0.3
Persimmon - 60	Pawpaw - 10	
Papaya - 60	Grape - 10	
Strawberry - 60	Apricot - 10	



The above information has been provided by our supplier. For further information please contact Australian Botanical Products, www.abp.com.au