# South Pacific Commission

Community Health Services SOUTH PACIFIC FOODS

Leafle

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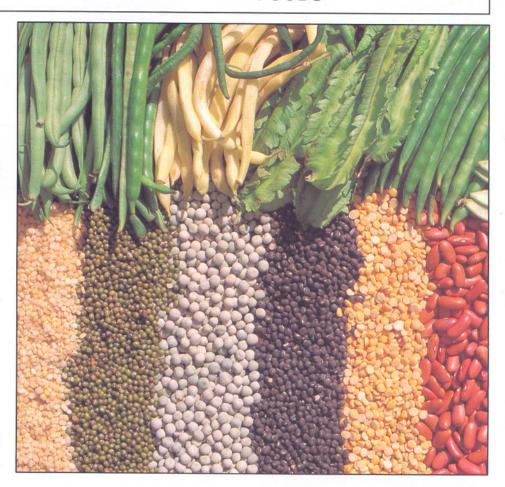
# Legumes

### **Exciting new foods**

One of the most nutritious and valuable groups of food plants available in the Pacific consists of legumes or pulses. They are not only grown for food but also help to improve the nutrition of the soil.

Legumes can be grown to produce mature seeds for food. The seeds can be dried, cooked and eaten alone or with other foods or dried and stored for later use. The leaves, flowers and tubers of some legumes can also be eaten as a vegetable. Legumes commonly found and eaten in the Pacific include beans, peas, peanuts, dhal, lentils and winged beans. They provide a very important food resource for all the family. In other parts of the world, legumes were regarded as a poor man's food. They were mostly prepared as a side-dish to add extra flavour and texture to the commonly eaten starchy staples. In more recent years, different edible varieties of legumes have been found to be of high food value, and are helping to provide an answer to some of the foodand health-related problems of the world.





# Improve your land

Legumes belong to the family of plants known as *Fabaceae*, formerly known as *Leguminosae* (no'ei). These include peas, lentils and beans.

They can grow on most soil types, depending whether they are grown for food or for improving the soil. Some varieties, such as cowpeas, need deep, rich soil with enough moisture. Others, such as long beans, generally require well-drained soil with an open texture. Some beans can even be grown successfully under dry conditions (e.g. winged beans). Planting and harvesting

of legumes does not require much work. Legumes are usually grown together with other crops or rotated regularly with other vegetables because of their ability to add nutrients to the soil.

For each of the legume crops, several improved varieties with different characteristics are available. Characteristics include dwarfness or tall growth habit, early maturity, and disease and pest resistance. Seek the advice of agricultural officers in choosing the variety to suit your needs and situation.

# Some legumes available in the Pacific

Common names (fill in your own local names)	Scientific name	Description	Food value, uses and preparation
1. Cowpea, black eyed bean, black eyed pea, marble pea	Vigna sinensis V. unguiculata	Climbing or dwarf plant with three-lobed leaves with twining seeds.	Good source of protein, young pods used as vegetables and in salads, mature seeds cooked, eaten as vegetables or added to soups and stews.
2. French haricot, kidney or string bean	Phaseolus vulgaris	Dwarf bushy plant; climbing varieties.	Immature pods can be used in salads; maturer pods steamed and eaten as a vegetable; dried seeds cooked and eaten as a vegetable or added to soups and stews.
3. Green pea, blue pea, sugar pea, edible-podded pea	Pisum sativum	Vines with many creeping varieties; round green seeds.	Good source of protein and fibre; immature pods eaten fresh; maturer pods shelled and cooked.
4. Hyacinth or lablab bean	Dolichos sp. Lablab niger	Short, twining plant with pale yellow pods, white flowers and seeds.	Good source of protein and fibre; young pods eaten as a vegetable; mature pods soaked in water and dried.
5. Long bean, snake bean, asparagus bean, yardlong bean.	Vigna sesquipedalis	Climbing plant with three- lobed leaves and long narrow pods.	Good source of protein; pods steamed or boiled and eaten as a vegetable.
6. Mung bean, green gram, golden gram	Phaseolus aureus	Erect or spreading plant bearing large, three-lobed leaves, yellow flowers; hairy pods.	Green pods eaten as vegetable; ripe seeds boiled, eaten whole, or split as dhal; can be roasted, ground into flour and made into porridge, biscuits, bread etc.
7. Mung bean, black gram	Phaseolus mungo	Trailing plant with green stem bearing yellow or pale yellow flowers; seeds are in various shades of green and black.	Immature green pods used as vegetable; ground into flour, which can be used in biscuits; combined with rice flour to make a fermented batter.
8. Peanut, groundnut *	Arachis hypogaea	Low-growing small plant, bearing seed pods underground.	Very good source of protein and B vitamins; roasted and eaten as a snack; used in soups and stews; ground and added to cakes and desserts; excellent snack for children.
9. Pigeon pea, yellow dhal, red gram.	Cajanus cajan	Plant can grow from 2 to 8 feet in height; has tiny, light yellow-red seeds.	Good source of protein; when young can be eaten as vegetable; mature seeds soaked before cooking, boiled or steamed, then pounded into paste, mixed with seasoning, served as a sauce.
10. Soya bean, soybean	Glycine max	Low, upright, small plant, producing small hard oval seeds.	Good source of protein, oil, B vitamins, minerals and fibre; seeds need to be soaked, then boiled for about 2 hours to become tender; used in soups or stews, used to make flour, soy sauce, soybean milk, soyabean curd (tofu) and soy paste (tempeh).
11. Winged beans	Psophocarpus tetragonolobus	Strong-growing perennial; a four-angled bean with wings; white flowers.	Pods eaten at all stages of maturity; dried seeds soaked, then boiled, roasted or curried.

<sup>\*</sup> No photo shown

## Uses

Leguminous seeds can be added to salads, curries, stews and soups. They make an excellent meal or snack for all the family.

A very nutritious snack for children can also be made by grinding the seeds into flour. Mix the flour with water to make a dough or paste, cook with vegetables and spices.

Sprouted beans or peas can be eaten raw or with other vegetables. Sprouts can be lightly fried in oil and served as a vegetable with meat and root crops.

# Dhal soup

#### Two servings:

1/2 cup of split peas (dhal) 2 tablespoons oil 1 small onion 1 clove of garlic 1/2 teaspoon of turmeric 2 cups water

- Soak dhal for a few hours or overnight and then boil until
- 2. Heat oil in a pan and then
- add onion and garlic. Add the cooked dhal and mix 3. well.
- Add water and turmeric and boil for a further 10-15
- Serve hot with rice or root crops.

Note: Spices or a little curry powder (1/4 teaspoon) can be added with the onion and garlic to give a spicy flavour.



### Vegetable hot pot

#### Four servings:

4 medium-sized sweet potatoes 1/2 cup dried beans 1 cup green leaves 2 tablespoons oil 2 small onions 2 tomatoes

- Put beans into a pot and cover with water. Leave to soak for at least one hour or overnight.
- Wash and peel the sweet potatoes and cut into pieces. Chop onions and tomatoes
- and fry with oil until soft.
- Add beans and sweet potatoes, plus one to two cups of water.
- Boil for approximately 30 5. minutes or until beans are soft.
- 6. Add the green leaves and coak for 10 minutes more.
- 7. Serve hot.

### Bean cake pudding

#### 4 servings:

1 cup dried beans 2 cups diluted coconut cream 1/2 cup sugar 1 cup cassava flour Softened banana leaves

- Soak beans overnight.
- Pour off water, then boil with coconut cream and sugar until soft.
- Mash and remove skins.
- Add cassava flour and mix to a smooth paste or a soft
- 5. Wrap in banana leaves and steam in a moderate oven (350°F or 180°C) or an earth oven for 1 hour.
- When cooked, cut into portion sizes and serve hot or cold with fresh coconut

Note: You can use foil paper or a clean tin or coconut shell instead of

#### Bean curry

#### Two servings:

- 4 cups green beans, chopped 2 tablespoons oil 1 clove garlic 2 small onions, chopped 1/2 teaspoon lemon juice (optional) 1 tablespoon curry powder
- Heat oil in shallow pan.
- 2. Fry garlic and onions.
- Add curry powder and stir fry 3. for 1 minute.
- Add beans and mix well.
- Cook for 7—10 minutes until beans are crisp and bright green in colour. Remove from heat and serve
- 6. hot with rice.
- Sprinkle lemon juice on top.

#### Pacific chow mein

#### Four servings:

- 1 tablespoon soy sauce
- 1 egg white beaten with 1 teaspoon of sugar
- 1 cup chicken meat (cut into thin strips)
- 6 tablespoons oil
- 1 onion
- clove of garlic
- cup mung bean sprouts
- cup sliced carrots
- 2 cups sliced beans (long or string beans)
- cup Chinese cabbage
- teaspoon cornflour
- 1 cup water or stock
- Mix soy sauce, sugar and beaten egg white and then marinate with the meat.
- 2. Stir-fry the chicken, using 4 tablespoons of oil until it is half done.
- Remove from pan and then fry the onion and garlic with the rest of the oil for 1 minute.
- Add carrots, sliced beans and Chinese cabbage.
- Add the half-cooked chicken to the vegetables and tossfry until vegetables are crispy. Add the bean sprouts and
- cook for a further minute.
- Mix cornflour and water or stock with the remaining soy sauce to a smooth paste, and then pour over vegetables. Stir for a few minutes until cornflour mixture is cooked.
- Mix well and then serve with root crops or rice.

Note: Chicken can be replaced by fresh fish or other fresh meat.

## High-fibre scones

Six servings:

2 cups wholemeal flour 2 teaspoons baking powder 2 tablespoons butter or margarine 1 cup bean sprouts 2 tablespoons grated cheese 1/2 cup milk

- Sift flour and baking powder into a bowl.
- 2. Cut butter into small pieces and rub into flour mixture.
- 3. Stir in bean sprouts and cheese.
- Gradually add milk, mix slowly, using a round-bladed knife, until the dough is soft.
- 5. Turn the dough onto a floured surface and knead lightly.
- 6. Cut into squares or rounds, place on a greased baking tray and bake in a hot oven (425°F or 220°C) for 12-15 minutes.
- Leave to stand for 5 minutes.

# French beans au gratin

Four servings:

4 cups French beans 3 1/2 cups mushrooms (sliced) Salt Pepper 6 tomatoes (sliced) 2 tablespoons grated Cheese

- String the beans and cut into halves.
- Place them in a baking dish.
- Sprinkle on the sliced mushrooms, season with salt and pepper.
- Add the tomatoes, cover with a lid and bake in a moderate oven (180° or 350°F) for about 20 minutes.
- Remove the lid, sprinkle with cheese and cook for a further five minutes without the lid.
- Serve hot.

#### Bean stew

Four servings:

4 tomatoes

8 sweet potatoes 1/2 cup dried beans cup green leaves Salt 4 tablespoons of dripping 4 spring onions

- 1. Wash and peel the sweet
- potatoes. Cut into pieces. Put the beans into a pot and cover with boiling water. Leave to soak for at least one hour.
- Remove the skins from the beans.
- Wash the spring onions and tomatoes. Chop into small pieces.
- Put the dripping in a pot over the fire. Fry the onions and tomatoes until soft.
- Add the beans, salt and sweet potatoes. Add 1 or 2 cups of water.
- Boil until the beans are soft (about 30 minutes).
- Add the green leaves and cook for 10 minutes more.
- Serve and eat hot or cold.



This leaflet is the sixteenth of a series devoted to the uses of local Pacific foods. Other leaflets available in this series are:

Leaflet 1 - Taro

Leaflet 2 - Pawpaw

Leaflet 3 - Mango

Leaflet 4 - Guava Leaflet 5 - Cassava

Leaflet 6 - Green leaves

Leaflet 7 - Banana

Leaflet 8 - Coconut

Leaflet 9 - Breadfruit Leaflet 10 - Pineapple

Leaflet 11 - Citrus fruits

Leaflet 12 - Pumpkin

Leaflet 13 - Sweet potato

Leaflet 14 - Yam Leaflet 15 - Nuts and seeds

Leaflet 17 - Fish

Leaflet 18 - Seafoods

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