

Growing Pigeon Peas

Cajanus Cajun



Pigeon pea would have to be **one of the most versatile permaculture plants**.

I started growing this legume shrub in my garden because it improves soil fertility by [fixing atmospheric nitrogen](#).

But I soon discovered that pigeon pea has many more uses:

- **It's a staple food crop that provides good protein.** You can use the green peas like fresh peas, and the dried peas like any other dried peas, beans or lentils. (In India they are actually one of the most popular pulses. Dhal is made from pigeon peas.) The peas can also be sprouted to make them even more nutritious, and they can be ground into flour.
- Leaves, flowers, seed pods and seed all make **nutritious animal fodder**. My chickens love the peas.
- The flowers **attract bees**.
- Pigeon peas can be frequently **pruned for mulch**.



- Every time you prune them (and also when the plant dies) the root nodules release nitrogen that can be used by other plants.
- Their open canopy shelters young, delicate plants, but lets enough light through for things to grow underneath.
- **A hedge** makes a good windbreak.
- Once established they self seed prolifically. Cut down the ones you don't really want and use as mulch. Leave the ones that grow in the right spots.
- They can make **a living trellis for climbers**.
- They have a very deep tap root that is able to break through hard pans and **improve the soil structure**. It also brings nutrients from the subsoil to the surface.
- Apparently the wood makes really **good firewood**. (I haven't tried that. A reader told me about it.) No, you don't get huge logs for heating, just sticks, but they are great to make small, very hot fires, say for cooking.

That are a lot of uses out of one single plant, and there are probably more. You can find my favourite ways to [use pigeon pea in my permaculture garden](#) on the bottom of this page.

What Exactly Is Pigeon Pea?



The pigeon pea (*Cajanus cajan*, family *fabaceae*) is thought to have originated in India, where it is still widely grown as a food crop. It is also used extensively as a

cover crop, green manure, inter crop etc. in many sustainable farming systems in the tropics and subtropics, and in many home gardens in warm climates.

The plant is a short lived perennial shrub. It grows to two to four metres and lives for about five years. The flowers are yellow or yellow and red. The leaves consist of three leaflets and are a dark green above and silvery underneath.

The fruits are pods, containing four to five seeds. The seeds can be a range of colours. Mine are light brown, but they can be cream, grey, purple or black, depending on the variety.



Growing Pigeon Pea

Pigeon peas will grow just about anywhere. They can cope with poor soils and little water. Of course they will grow faster, bigger, better, and live longer if they have plenty of water and nutrients.

Most varieties are not frost tolerant, although there are some newer varieties that supposedly can handle a bit of frost. If you get freezing winters you can grow them as an annual crop. That's not ideal from a permaculture point of view, but it's still a great food crop and soil improver.

You grow pigeon peas from seed. There are many varieties of pigeon pea around the world, from tall tree like species, to smaller bushes and dwarf varieties. The different varieties also mature at different times. If you live in a cool climate grab a faster maturing species.

If you want to take advantage of the plant's ability to fix nitrogen then you may have to inoculate the seeds. It depends where you live. (See [Nitrogen Fixing Bacteria](#).)

Pigeon Pea is not very specific. For inoculation you can use any Rhizobium of the cowpea group. I used a Rhizobium that I purchased for my Dolichos lablab seeds and it worked. (I later found out that it was indeed a cowpea Rhizobium.) Planting depth is whatever. Just stick them in the ground, they'll grow. The seeds take about two to three weeks to germinate. Germination is faster in warm soils and takes longer in cooler climates.

Initially the plant grows very slowly. For about three months it will look like nothing much is happening, but then they take off.

Flowering and Harvest. Plants can start flowering in as little as two months, and you could theoretically harvest the first seeds after three to four months.

However, depending on the variety and the planting time it can take a lot longer, up to eight months.

The plants are day length sensitive and will flower sooner when the days are short.

Pick the pods green if you want fresh peas, or leave them on the plant to dry.

Pigeon peas are very heavy croppers and the seed pods grow in big clusters at the end of the branches. It's easy to gather a good amount for a meal.

You can prune your plants at any time if you want to use them as mulch. If you need all the peas then the best time is obviously after the harvest. However, my most vigorous bushes get a good cut every few months, and they just keep growing back bigger and stronger.

Pigeon Pea In Permaculture Designs

Here are a few ways I have used pigeon peas:

- **A hedge or windbreak.** Plant them in a row, about one to two feet apart. Giving the hedge a regular haircut yields lots of mulch for nearby plants. At harvest time you have a lot of pigeon peas in one place, easy to gather. (I don't usually worry about harvesting all the other bushes on my property.)

- **Plant them around young fruit trees.** I keep trimming them so they are never higher than the tree. That way they provide shelter for the tree, but they don't shade it. The trimmings I throw under the tree as mulch and of course the nitrogen from the root nodules feeds the tree.

As the tree gets older and taller the trimming is not necessary anymore. The pigeon peas will keep growing, self seeding, dying and feeding the tree on their own. I stay out of it, unless I'm hungry and I have run out of pigeon peas elsewhere.

- **I use pigeon pea as a cover crop during the wet season.** Our torrential monsoon rains leach everything out of the soil, so the more nutrients are tied up in plant matter the better. For that I just throw the seed around wherever there is unused space (for example dry season vegetable beds).

When the rains have finished the pigeon peas are cut and used as mulch or on the compost. The roots stay in the ground and release nitrogen for use by the dry season vegetables.

- **A living trellis.** Some of the pigeon peas I only prune right back and then plant a tomato bush underneath (make sure you plant them on the sunny side).

I hate trellising tomatoes. It's work. Especially removing a dead tomato from a trellis is annoying and needless work. I let the tomatoes climb into the pigeon peas and when the tomatoes are finished I cut both back to the ground and throw them on the compost together. (Or in the chicken pen. Or under a nearby fruit tree). Much easier!

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