Pigeon Pea

Growers' Guide

Revised Edition

National Agricultural Research Organization

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Introduction

Pigeon pea can grow throughout Uganda but is mainly *grown* in Northern and Eastern Uganda. It provides a cheap source of plant protein to the rural poor. Pigeon pea is consumed as a split pea or whole grain and sometimes as green pods. It can be a good source of forage for livestock and has a potential as poultry feed. The stems provide wood fuel. Pigeon pea also improves soil by nitrogen fixation.

Varieties

Long and medium duration local types are being grown. Shorter duration types are still being tested on-farm. One medium line KAT 60/8 is also undergoing on-farrn testing. These yield up to 2500 kg/ha.

Land Preparation

Pigeon pea requires a well prepared seedbed which drains well.

Seed Rate

For a row cropped pure stand, 25 kg/ha is required for long and medium duration; and 40 kg/ha for short duration.

Planting

Use uniform coloured, non-perforated seed preferably from the previous season dressed with Fernasan D or Thiram. Mostly planted as an annual crop in the first rains. Medium and long duration varieties are often inter- cropped with cereals, cassava, groundnuts and beans while short duration types are recommended for mono-cropping. If row cropped, for long duration varieties the spacing is 75 cm between rows and 40-45 cm between plants; while the medium duration is 75 cm between rows and 20-25 cm between plants, arid for short duration types 30-40 cm between rows and 1 0 cm between plants.

Weeding

Weed at 3-4 weeks after planting and thin to one plant per hole, then weed again before the canopy forms for monocrop.

Maturity

Pigeon pea matures unevenly; the long duration types taking 180-300 days, medium duration 150-180 days while the short duration take 90-150 days.

Yields

Yields of pigeon pea are variable. Local varieties yield as low as 400-500 kg/ha. Improved lines under good management can yield up to 2500 kg/ha. Improved cultivars of shorter maturity periods have promising higher yields than the locals.

Harvesting and Drying

Harvest only the dry pods and sun dry thoroughly before storage. Well dried pods are easy to thresh before storage. For short duration types whole stems are cut and dried properly before threshing.

Storage

Dress the threshed seed with Actellic 2%; powder and store in rodent-proof structures. This will minimize damage by bruchid beetles (*Callosobruchus spp*) and rodents respectively.

Pests

The major pests attacking pigeon pea include the pod borers e.g. Aphids, *Helicoverpa armigera* and maruca *testulalis,* Flower beetles, Thrips, and Pod sucking bugs.

Control: Is by use of Fenitrothion 50% e.c, Salut, Decis and Dursban. Spraying is recommended first before flowering and during podding.

Diseases

Fusarium wilt, Phytopthora blight, Powdery mildew and Leaf spot are important. It may not be economic to control these diseases on a subsistence crop. Seed dressing with Thiram or Femasan D, crop rotation, and timely planting may reduce disease incidence.