

RAJAH 1

F1 Hybrid Hot Pepper

OUTSTANDING QUALITIES

- ◆ CAYENNE TYPE
- ◆ VIGOROUS PLANTS
- ◆ VERY HOT
- ◆ HIGH YIELD POTENTIAL
- ◆ IDEALLY SUITED FOR DRYING

Rajah 1 is an early maturing F1 hybrid hot pepper for the fresh and drying market. The bearing habit of **Rajah 1** is pendent and its fruit type can be compared to Long Slim Cayenne types, but with a superior quality. The plants have a strong root system, are uniform and tend to handle difficult conditions exceptionally well. Plants have good foliage cover that protects the fruit against sunscald. Fruit size is medium (12 cm in length by 1.5 cm in diameter), weigh around 10 - 12 g and have thin fleshed walls. The uniform fruit are very hot, with a good flavour. Fruit colour very well from a medium dark green to a dark red when mature. **Rajah 1** is particularly well adapted in Southern Africa being developed locally and is also suited for home garden growing.



SPECIAL VARIETAL REQUIREMENTS

- Contact your area representative for more information

CHARACTERISTIC*	RAJAH 1
KIND	F1 hybrid hot pepper (<i>Capsicum</i> L.)
TYPE	Cayenne type
MATURITY	Early (85 days after transplant)
FRUIT DIMENSIONS	12 x 1.5 cm
FRUIT SHAPE	Long cylindrical
FRUIT WALL	Thin
SMOOTHNESS	Smooth
FRUIT COLOUR	Medium dark green turning to dark red
FLAVOUR	Very hot; good flavour
PLANT TYPE	Uniform, strong bush
BEARING HABIT	Pendent
DISEASE REACTION (SCIENTIFIC)	-
PRODUCTION	Open field
POPULATION GUIDE	25 000 – 33 000 plants per ha
USE	Home gardens, pre-pack, bulk packaging and drying
SPECIAL FEATURES	Strong grower, long bearing period and suited for drying

* Characteristics given are affected by production methods such as soil type, nutrition, planting population, planting date and climatic conditions. Please read disclaimer.

 WARNING: VARIETY PROTECTED UNDER **PLANT BREEDERS RIGHTS**. UNAUTHORIZED MULTIPLICATION AND/OR MARKETING OF SEED PROHIBITED.

Disclaimer: This information is based on our observations and/or information from other sources. As crop performance depends on the interaction between the genetic potential of the seed, its physiological characteristics, and the environment, including management, we give no warranty express or implied, for the performance of crops relative to the information given nor do we accept any liability for any loss, direct or consequential, that may arise from whatsoever cause. Please read the Sakata Seed Southern Africa (Pty) Ltd Conditions of Sale before ordering seed.

Resistance: is the ability of a plant variety to restrict the growth and development of a specified pest or pathogen and/or the damage they cause when compared to susceptible plant varieties under similar environmental conditions and pest or pathogen pressure. Resistant varieties may exhibit some disease symptoms or damage under heavy pest or pathogen pressure (HR = High resistance, IR = Intermediate resistance).

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GENERAL TIPS FOR HOT PEPPER PRODUCTION

Climatic requirements

- Peppers grow best when relative humidity (RH) is 65 – 75 %
- Pepper plants need good light (1 100 – 1 300 $\mu\text{s}/\text{m}^2$ or 60 000 lux). Heavy shade can induce stress, but light shade stimulates growth
- The ideal temperature for peppers is around 18 °C (minimum) and 25 °C (maximum)
- Temperatures lower than 15 °C result in very poor growth. Temperatures higher than 28 – 30 °C induce stress

Despite the need for warm conditions the plant is sensitive to high temperatures. Above 32 °C the flowers are inclined to fall off and few fruits, if any, set at temperatures above 35 °C, especially when these high temperatures are coupled with dry winds. Fruit that form at such high temperatures is usually malformed. The fruit is also very sensitive to sunburn and for this reason Sakata has select varieties that develop well leaf covering to protect the fruit.

Soil requirements

Like most other plants, hot peppers can be grown successfully on a wide range of soils but they prefer sandy loam and loam soils. Plants are sensitive to acid soils and do best where the pH is between 5.5 and 7.0.

A sound water regime is important, with the accent on good drainage and water retention capacity. The latter is particularly important in limiting temporary water shortages and wilting of the plants to the minimum.

Transplanting

As with all plants, pepper seedlings should be handled with care when being transplanted. The seedbed or growing medium should be loosened so that the seedlings can be lifted carefully with as many roots and as much soil as possible. Weak, badly formed or diseased seedlings should be discarded, leaving only the best for transplanting. Should a flower form at the tip of the plant, as is the case with some cultivars, it should be removed, but no other pruning or removing of leaves should be done. Such practices encourage the spread of virus diseases, to which peppers are very susceptible.

Transplanting is done preferably on cool days or in the late afternoon. Wet the plant rows the day before transplanting. The transplant should be placed in a suitable hole and the soil firmly pressed down around it. The plant should not be pressed into the mud with the finger. Watering should occur immediately after transplant into the compressing hole or to the side of the seedling (about 1 ℓ per seedling). This should eliminate air pockets around the roots and cause contact with the pre-moistened subsoil. Capillary action will keep the seedling moist and encourage the roots down. Cutworm bait is essential.

Yield expectations

Yield varies significantly from season to season and year to year due to climatic factors, varieties used, pollination, etc. F1 Hybrid varieties can increase the yields significantly.

Green fruit

F1 hybrid: 35 - 60 t/ha

Open pollinated : 25 - 40 t/ha

Dry fruit

F1 hybrid: 15 - 20 t/ha

Open pollinated : 10 - 15 t/ha

Powdery mildew

In the production of hot peppers Powdery mildew is a common disease and of vast economical importance. The only effective way to control Powdery mildew is to have a holistic approach in the production of sweet peppers.

Conditions that encourage the growth of Powdery mildew include temperatures of 15.5 – 27 °C. Powdery mildew spores can survive at temperatures as low as 4 °C, under low light intensity and have the ability to even germinate in the absence of water.

Conditions that suppress disease development include water on the plant surface for extended periods of time, day temperatures above 32 °C and night temperatures above 18 °C, direct sunlight or high pH conditions on the leaf surface.

Disease reaction definitions:

Resistance: is the ability of a plant variety to restrict the growth and development of a specified pest or pathogen and/or the damage they cause when compared to susceptible plant varieties under similar environmental conditions and pest or pathogen pressure. Resistant varieties may exhibit some disease symptoms or damage under heavy pest or pathogen pressure. Two levels of resistance are defined:

High/standard resistance (HR): plant varieties that highly restrict the growth and development of the specified pest or pathogen under normal pest or pathogen pressure when compared to susceptible varieties. These plant varieties may, however, exhibit some symptoms or damage under heavy pest or pathogen pressure.

Moderate/intermediate resistance (IR): plant varieties that restrict the growth and development of the specified pest or pathogen, but may exhibit a greater range of symptoms or damage compared to resistant varieties. Moderately/intermediately resistant plant varieties will still show less severe symptoms or damage than susceptible plant varieties when grown under similar environmental conditions and/or pest or pathogen pressure.

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