



## Good agricultural practices for the production of ware potato in Cameroon

### Potato: an important crop

Potato is the third most widely-cultivated food crop in the world and one of the most profitable food crops. Therefore, it allows producers to improve their living conditions with additional income to build homes, improve schools, and strengthen food security. Potato is also a vital source of nutrition, especially for young people, as it contains substantial levels of protein, vitamins, iron, zinc and potassium.

### Optimal growing conditions for potato

Temperature	Cool, between 16-20 °C
Soil	Deep, well-drained, and loose
Altitude	Greater than 800 m above sea level
Growing cycle	At least two production cycles without potato or other crops of the same family (e.g., eggplant, chili, pepper, tomato, tobacco, black nightshade)
Ploughing	Thoroughly plough the soil to a depth of about 30 cm
Seeds	Purchase certified seed varieties listed in the national catalogue: Cipira, Bambui Wonder, IRAD 2005, Jacob 2005, MAFFO, Panamera, Sevim, Juwel, Marabel and Jelly.
Water	Ensure the plants are supplied with water at least once a week (rain or irrigation). Water is critical when tubers are formed (tuberization).





### What to do before planting?

After clearing the land selected for potato cultivation, stake it out using a decameter, rope and wooden sticks (note: for larger fields, use a row marker). Then plough the soil using a daba, hoe and rake. After ploughing, make planting furrows 15 cm deep at intervals of 75 - 80 cm.

### How to plant?

Using your hands, collect fowl droppings (about 250 - 400 g depending on the fertility of the soil over 3 to 5 t/ha) and spread it over a linear meter in the furrows. As a rule of thumb, the manure collected with two adult hands can be applied to 2-3 seed tubers. Use a mixture of NPK

fertilizer (type 13-13-21) and N fertilizer (type 15-0-0) in the ratio of 4/1 (500 kg for the first and 125 kg for the second per hectare). In other words, 7.5 g applied to each plant at planting and the other dose in the same amount at first hilling. A Fanta soda bottle cap filled to the brim is the required dose. Then place the tubers 30 - 40 cm apart on the planting line, equivalent to 1.7-2 t/ha of seed potato using tubers 30-45 mm in diameter.

### Avoid weeds and hill up well

Weeding eliminates elements that compete with potato for light, nutrients and water. Weeds also harbor pests and diseases.

The first weeding	Should be done with a hoe just after the plants have emerged
The first hilling up	Takes place when hoeing and is combined with weeding to loosen and aerate the soil, increase its capacity to retain water, and allow the proper development of stolons and tubers
The second hilling up	Occurs 2-3 weeks after the 1st hilling





## The great enemies of the potato

Disease / Pest	Symptoms	Solutions
Late blight	<ul style="list-style-type: none"> <li>On leaves: large brownish irregular spots which eventually dry out.</li> <li>On stems: infested stems are weakened.</li> </ul>	<ul style="list-style-type: none"> <li>So-called CONTACT fungicides (surface action) such as Manga Plus, Mancozeb, Penncozeb, Balear, etc.</li> <li>So-called SYSTEMIC fungicides (action everywhere) such as Orvego, Bonsoin, Ridomil, etc.</li> </ul>
Bacterial wilt	<ul style="list-style-type: none"> <li>On leaves and stems: wilting;</li> <li>On tubers: a milky ooze at the level of tuber eyes to which the soil adheres.</li> </ul>	Pull up the wilted plant, as well as the soil surrounding the roots; plant healthy seeds; and rotate crops.
Viruses	<ul style="list-style-type: none"> <li>Leafroll virus causes leaflets to curl upward and become hard and brittle to the touch.</li> <li>Other viruses cause mosaic symptoms on leaves.</li> </ul>	Control transmitting insects such as the white fly
Potato tuber moth (PTM)	The larvae enter the tubers through the eyes and dig galleries	and aphids with insecticides; uproot and destroy any plant that can harbor the insects.

## When and how to harvest?

- Wait for the natural death of the foliage before harvesting to obtain maximum yield;
- Avoid harvesting when it rains or when the soil is too wet;
- Use a hoe or use your hands to dig up the tubers; and
- Leave the tubers on the ground for a while before picking them up.

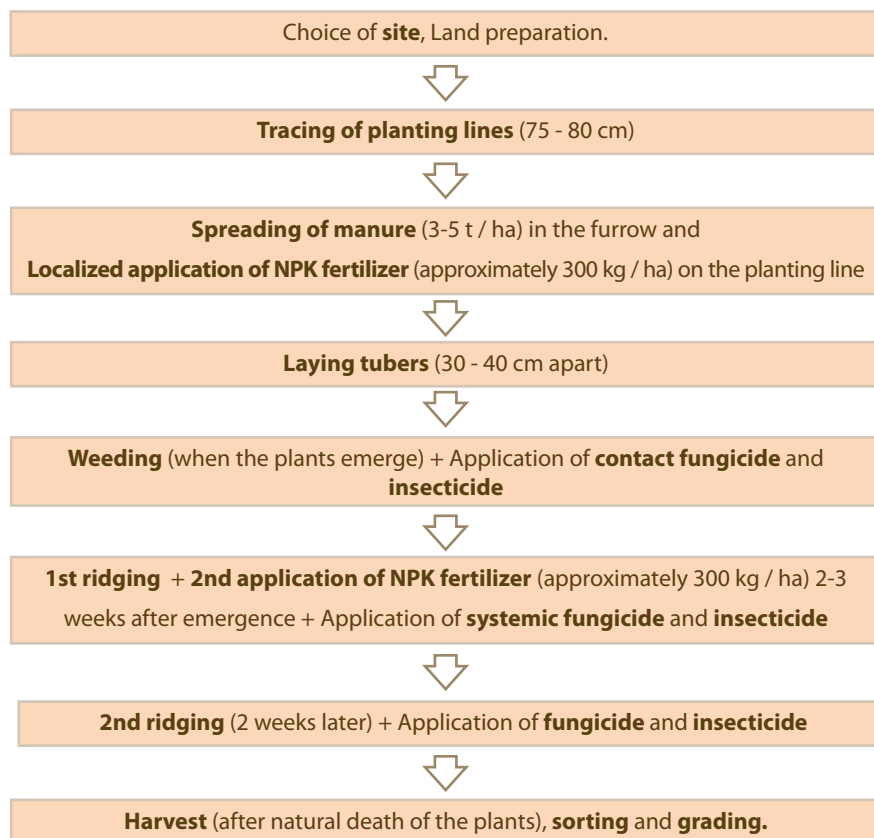
At harvest, tubers showing signs of rotting are collected last.

Tuber grading begins in the field to properly separate the lots during sale. It is important to note that different tuber grades sell differently.





## Simplified diagram for ware potato production



### Authors:

Eric Tiozang, Dieudonné Harahagazwe, Victorine Fornkwa, and Ibrahim Adamu.

October 2021



CIP thanks all donors and organizations that globally support its work through their contributions to the CGIAR Trust Fund. <https://www.cgiar.org/funders/>



© October 2021. This publication is copyrighted by the International Potato Center (CIP). It is licensed for use under the Creative Commons Attribution 4.0 International License