



# **SELECT THE BEST**

POSITIVE SELECTION TO IMPROVE FARM SAVED SEED POTATOES

## **PICTURE BOOK**

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Women farmers practicing positive selection, Ol Kalou, Kenya





# Overview and description of disease symptoms

## Bacterial wilt partial:

Wilting starts with a few leaves or a single branch drooping

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## Bacterial wilt whole plant:

Finally the whole plant wilts. The neighbour may look healthy but its tubers will carry the disease

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## Bacterial wilt tubers:

Soil sticks to the eyes, oozing and browning of the vascular ring, finally rotting starts from the vascular ring

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**Leaf roll:** leaves roll up, plant more erect, leaves look dry and are brittle

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**Mosaic severe:** Lighter green patches on the leaves

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**Mosaic mild:** Light green patches on the leaves, hard to see, best seen in the shade with white paper underneath

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**Erectness:** Stems and leaves pointing upwards; leaves and whole plant often smaller, leaves brittle

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**Dwarfing:** Plants stay small, may emerge later and be malformed. Plant may grow normally and then stop growing

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**Crinkling:** The edges of the leaf are not smooth but show crinkles; mild crinkling is difficult to see

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## Paracrinkling:

Combined crinkling and leafroll. Leaves bent upward and sides crinkled.

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**Chlorosis:** Leaves yellowing, usually starts in the top of the plant, veins may stay green

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**Bunchiness:** Leaves are small and grow tightly together so that they form a bunch

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## Multiple symptoms:

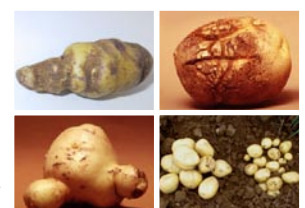
Leafroll, erectness, chlorosis, mosaic and crinkling

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**Tuber symptoms:** Few and/or small tubers, malformed tubers and cracking tubers may indicate virus infection

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## Late blight whole plant:

When late blight is not stopped eventually the whole plant dries up

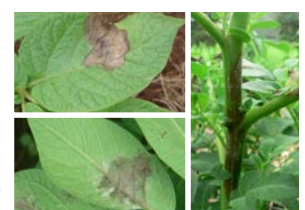
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## Late blight leaves and stem:

Lesions on leaves and sometimes stems, white mycelia may be visible, especially on the back of leaves

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# BACTERIAL WILT

# PARTIAL





## BACTERIAL WILT

## WHOLE PLANT





## BACTERIAL WILT



## TUBERS





# LEAFROLL





**MOSAIC**

**SEVERE**





**MOSAIC**

**MILD**





# ERECTNESS





# DWARFING





**CRINKLING**

**SEVERE AND MILD**



**SEVERE**

**MILD**



# PARACRINKLING





# CHLOROSIS





# BUNCHINESS





## **MULTIPLE SYMPTOMS**

**LEAFROLL, CRINKLING, ERECTNESS,  
CHLOROSIS, PURPLE TOP, MOSAIC**





# TUBER VIRUS SYMPTOMS





## LATE BLIGHT

## WHOLE PLANT





## LATE BLIGHT



## LEAF AND STEM INFECTION





The International Potato Center (CIP) seeks to reduce poverty and achieve food security on a sustained basis in developing countries through scientific research and related activities on potato, sweetpotato, and other root and tuber crops, and on the improved management of natural resources in the Andes and other mountain areas.

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CIP is supported by a group of governments, private foundations, and international and regional organizations known as the Consultative Group on International Agricultural Research (CGIAR).

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ISBN: 978-92-9060-304-7

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Press run: 500  
May 2007

