

NORTH WEST DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT. FARMER SUPPORT SERVICES.

Potato production

Presented by: NA Nesengani
nndanganeni@nwpg.gov.za

Date: 12 February 2021
Goedgevonden village, Dirang Vegetable project site

RSS
Arable Farming - Potchefstroom

Contact : (018) 299 6529



**Agriculture &
Rural Development**
Department:
Agriculture and Rural Development
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



PRESENTATION OUTLINE

1. Introduction
2. Growth stages
3. Climatic requirements
4. Soil and fertiliser requirements
5. Potato seed and cultivars choice
6. Cultivation and planting
7. Pest control and Crop rotation
8. Conclusion



1. INTRODUCTION

- Crop cultivated for its edible tubers.
- Nutritional Value: 85% of DM (starch and the rest is protein).
- Good agric management is the key for successful potato production.
- Higher input production cost than most crops.
- There are many factors affecting potato production and profitability.



2. Growth stages

➤ Growth and development of potatoe plant is divided into 5 satages:

- Seed sprouting
- Vegetative growth
- Tuber initiation
- Tuber bulking
- Maturity.



3. Climatic requirements

- Cool season crop (average temp. 7^o C-20^o C.
- Clean water which mixes well with the herbicide to be applied.
- Good production obtained in frost free areas but tolerant to light frost.
- Good production is obtained in high rainfall areas (800 to 1200 mm/annum).



4. Soil and fertiliser requirements

- Can be grown in a variety of soils, but good production is obtained from fertile, deep, well drained sandy loam soils.
- Potato plants need large amount of fertilisers.
- Soil sampling for lab analysis is necessary.
- Manure is recommended for resource poor farmers.
- Topdressing is necessary while at the same time ridging the crop.



5. Potato seed and cultivar choice

- Use healthy and certified planting materials.
- Seeds must be planted when they are well sprouted
 - There are many cultivars that have been developed and available in the market
- There are many cultivars that have been developed and available in the market
- Cultivar choice depends on many factors such as
 - Intended use,
 - pests and diseases susceptibility,
 - Days to maturity.



6. Cultivation and planting

- Land preparation
 - Primary cultivation is done by ripper, plough and later disc soil for final seedbed preparation.
- Planting and planting dates.
- In cooler area like large part of NW it is advisable to start planting seeds in September to October when temperature has started to get warm and rainfall is enough.
- Apply irrigation if rainfall is not sufficient.
- Spacing is 90cm apart and 30cm within a row.

7. Pest control and Crop rotation

- Weeds, Pest and disease can cause a serious economic loss of production and profit.
- Common diseases and pests include early and late blight, scab, mosaic virus, tuber moth and nematodes.
- Weed control is necessary to eliminate competition between weeds and potato plants.
- Good weed, disease and pest control strategy is necessary for higher potato yield.

8. Conclusion

THE END

