

# ***Tilletia indica* ( Karnal Bunt ) in South Africa**

## **Current status**

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**agriculture,  
forestry & fisheries**

Department:  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA

# Bunt of wheat seeds

- Fungal pathogen
- Can be present but not detected for many years
- Minor crop damage
- Very difficult to eradicate and viable in the soil for up to five years
- Main effect is on seed quality with possible large cost implications due to quality loss
- Compliance to phytosanitary conditions of wheat importing countries may be costly or not possible if area freedom is required



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- Is a quarantine pest for South Africa and is regulated in terms of the Agricultural Pests Act, 1983 (Act No.36 of 1983).
- Is officially present in certain areas as published in the Government Gazette in terms of the Control Measures of the Agricultural Pests Act (APA) R110.
- R110 table 5 list the infected farms and districts.
- It is mainly areas in the Northern Cape such as Douglas and Hopetown.
- Karnal Bunt is present in some areas in South Africa and officially controlled



# R110

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- *Tilletia indica* is a prohibited pathogen in terms of table 9
- Wheat must be free from Karnal Bunt before it can be removed from quarantine areas
- Wheat can only be removed from listed infected areas by means of a permit or is certified free from the pathogen or it is a plant product which cannot act as a pathway to spread the pathogen to new production areas
- It means that wheat cannot move from infected or quarantine areas listed in table 5 to areas free from the pathogen if the executive officer is not satisfied that the necessary measures have been taken to ensure the consignment will not contaminate or infect new production areas



# APA and R110 continue

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- Literally the regulation says the wheat must be cleansed from the pathogen
- It is also compulsory in terms of R110 to notify the occurrence of Karnal Bunt of any other regulated pest to the executive officer immediately if it is detected in an area/s not published in the Gazette or not yet quarantined.
- New areas of detection can be quarantined in terms of the APA and be regulated in terms of R110
- This entails the issuance of official orders to land users (e.g. producers and silo owners) affected by Karnal Bunt
- It is therefore important to determine infected areas/farms or silos in new production areas.



# DAFF role players:

- **Directorate Plant Health (DPH)**- Legislation, procedures, action plan for response and control, pest data sheets, coordination, GIS support, training, international notification of pest detections
- **Directorate Inspection services (DIS)**- Operational support,, rapid response, execution of relevant legislation, documentation of field data, removal control, compliance checking and auditing
- **Directorate Food Import and Export Standards (DFIES)**- Operational support, promotions and awareness, strategic role player development, meeting arrangements with provincial, local and tribal role players

## Way forward

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- The quarantine status of pathogen in South Africa must be re-evaluated
- This will entail a Pest Risk Analysis(PRA) which objective would be to determine if this pathogen should be regarded as a regulated pest.
- If it is still regarded as a regulated pest to which extent will it be regulated in terms of the APA.
- I.e. Only seed for planting or seed for human consumption
- It will still be regulated in terms of the Agricultural Product Standards Act for quality purposes.
- The PRA will include a national survey
- Such a survey should start by making use of data from the two previous official surveys which was conducted between 2000 and 2009 and of export certification data since 2000 as well as data from research organisations and from silos who test for Karnal Bunt before wheat is accepted.
- All positives from such an exercise will have to be confirmed, but it will save some time and costs while the PRA can continue.
- DAFF will amend legislation according to the findings.



## CONTACT DETAILS



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