

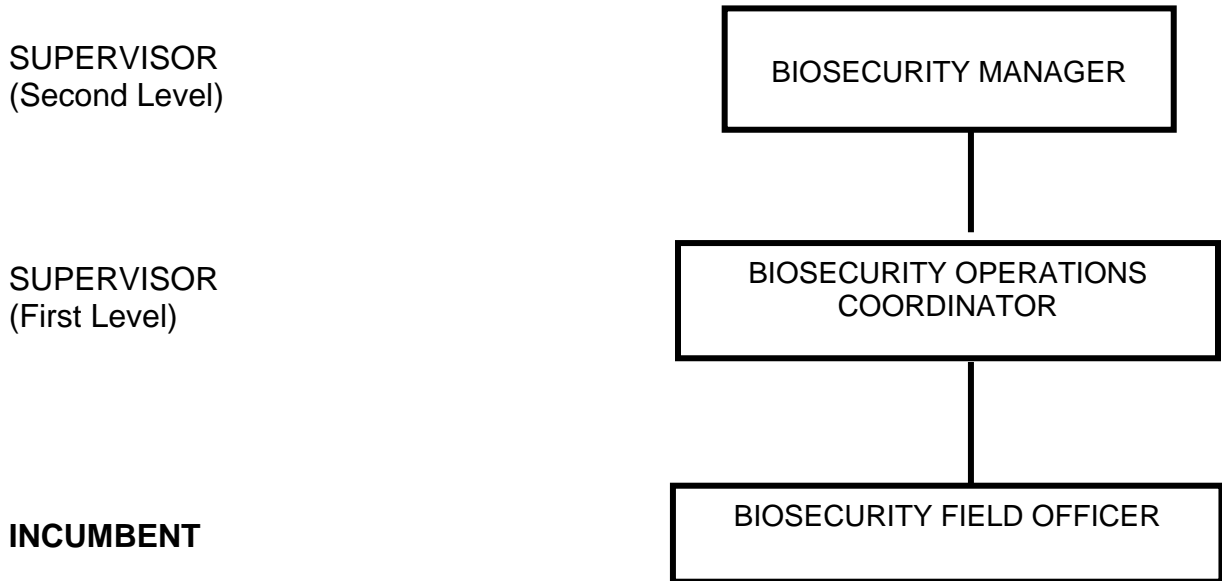


JOB DESCRIPTION

Field Officer in plant biosecurity surveillance and diagnostics

NUMBER OF INCUMBENTS DOING THIS JOB	1
LOCATION	Citrus Research International, Port Elizabeth
PROGRAMME/RESEARCH PORTFOLIO	Biosecurity
NAME OF SUPERVISOR	Wayne Kirkman

POSITION IN THE ORGANISATION



Job content agreed by incumbent: Date:

Approved by Supervisor (first level) (Signature): Date:

Approved by Supervisor (second level) (Signature): Date:

1. Background and purpose of the Job

The southern African citrus industry is the second largest exporter of fresh citrus fruit in the world. The industry has earned global recognition as a premier supplier of superior quality citrus fruit. Citrus Research International (CRI) aims to maximise the long-term global competitiveness of the southern African citrus growers through the development, support, co-ordination and provision of Research and Technical services.

CRI is currently expanding capacity in citrus biosecurity. The long-term sustainability and global competitiveness of the citrus industry relies on strong biosecurity actions including surveillance of pests and diseases. One of the key threats to the citrus industry is citrus greening disease (Huanglongbing, HLB) caused by the phloem limited bacteria *Candidatus Liberibacter asiaticus* (Las). The disease and its primary vector the Asian citrus psyllid (ACP), are of Asian origin, but have spread to North and South America. The combined presence of ACP and Las in citrus cultivation areas in the Americas has been shown to be devastating to citrus production.

Both HLB and ACP are not yet in South Africa, but have been confirmed to occur in East Africa. CRI is undertaking surveillance activities in neighbouring countries as well as in South Africa to enhance early detection. Containment of pests and diseases including ACP and Las will only be possible if the pests and diseases are detected early.

Other biosecurity concerns to the citrus industry include citrus leprosis, African greening caused by the bacteria *Candidatus Liberibacter africanus* (Laf), and *Bactrocera dorsalis* which need to be monitored and eradicated. CRI has been engaged in surveillance, monitoring and containment of these pests, and this effort needs to be continued in the future on an ongoing basis.

2. Major task headings

- 2.1 Placing and servicing of yellow sticky traps
- 2.2 Conducting pest and disease surveys
- 2.3 Entering pest and disease monitoring results in electronic database
- 2.4 Assisting with any relevant biosecurity activities
- 2.5 Providing field and laboratory assistance in projects under the Integrated Pest Management portfolio

3. Planning necessary in the job

Planning of trap placement, servicing and surveys.

Planning for ordering operational materials.

4. Deadlines

Ongoing and as specified by supervisors

5. Degree of Supervision received

Laboratory, field supervision and planning by Wayne Kirkman and Elma Carstens of Biosecurity division, as and when required; diagnostics to be verified by either of the above or other CRI experts.

6. Working conditions

Frequent travel to trapping sites.

7. Requirements necessary to conduct the job successfully

- a. **Education:** **Minimum-** BSc/diploma in Biological Sciences
Ideal- BSc/diploma in Biological Sciences with coursework and experience in Entomology
- b. **Training:** Use of stereomicroscope for insect identification, pest identification, survey methods, sample preparation.
- c. **Licence:** A valid Code B driving licence
- d. **Desired traits:** Ability to work independently and as part of a team; Ability to follow instructions and meet deadlines

Description of Tasks/Processes/Operations

KEY TASKS (time allocation)

1. Place and service yellow sticky traps (25%)

- 1.1 Placement and servicing of traps in orchards in relevant production regions (detection or delimiting surveys)
- 1.2 Assist with implementation of eradication plans
- 1.3 Purchasing of trap materials required in monitoring.

2. Conduct pest and disease surveys (25%)

- 2.1 Conduct surveys in relevant production areas
- 2.2 Assist in conducting surveys in relevant production buffer zones
- 2.3 Collect, prepare and courier samples to relevant labs for identification by specialist

3. Enter pest and disease monitoring results in electronic database (10%)

- 3.1 Maintain monitoring database and back-ups of all pests monitored.
- 3.2 Summarise monitoring data as instructed by supervisors.

4. Assist with any relevant biosecurity activities (25%)

- 4.1 *Bactrocera dorsalis* surveys and eradication plans
- 4.2 Assist in field and laboratory activities under the Biosecurity Portfolio
- 4.3 Data entry of experimental results

5. Provide field and laboratory assistance in projects under the Integrated Pest Management portfolio (15%)

5.1 Assist in field and laboratory studies in projects under the Integrated Pest Management Portfolio

5.2 Data entry of experimental results.