



Job Description Seed Legumes Nursery Assistant

Reports to: Seed Production Team Leader

Company: Grasslanz Technology Ltd

Client(s): AgResearch, Seed industry

Location: Lincoln

Definition of Business:

Grasslanz is a plant technology provider. Its products are proprietary seeds, grass endophytes and plant genes. These technologies are licensed to seed companies who deliver them through seed to our end users who are farmers. New products are created by investing royalty revenue in R&D, primarily with AgResearch. Grasslanz is the premier source of grass endophytes and white clover and a world leader in the development of temperate forage cultivars.

Grasslanz manages plant intellectual property relevant to pastoral agriculture and manages contract R & D between seed companies and providers. The current business centres around forage plants but this is to be extended to other economic plants such as crops and cereals.

Current turnover is around \$12 million. The business has 14 staff covering areas of nucleus seed production, intellectual property management, contract management, product development management, and customer relationship management.

Purpose:

To manage the final stage of new cultivars development, through parental selections for potential seed production and developing seed yield screening systems. To ensure excellent quality and yield from pre-nucleus cage isolation multiplications; and evaluate pollinator and pollinating systems for forage legumes. To acquire the knowledge and develop the expertise necessary to run the operations independently.

Position Scope:

To work with the nursery manager, taking plants or small quantities of legume seed from the plant breeders and putting them into the screening system to select them for various traits, particularly focusing on seed production, and subsequently multiply the selected material through a cage isolation process in a way that the resulting lines are pure to form and contamination free.

Effective management of the cage isolations will provide top quality seed for agronomic testing and Nucleus seed production. This increases the efficiency of our high-grade

seed business, allowing us confidence to release new cultivars to our clients (Seed Companies), thus enabling Grasslanz to collect royalties from these cultivars, which can then be invested back into research and development.

Key Liaisons:

Grasslanz Technology team including summer casual staff, Grasslands Innovation, seed companies, AgResearch scientists, owners of land we lease, external customers, MPI, AsureQuality, agricultural contractors, Margot Ford Forage Germplasm Centre.

Delegated Authority:

As per delegations policy

Key Result Areas:

Follow the Seed Legumes Nursery Assistant- Best Practice Protocol to ensure quality results. Summary of protocols:

1. Trial preparation
 - ◆ Prior to planting season work closely with the nursery manager to scope their requirements and prioritise lines to be multiplied
 - ◆ Request seed/plants early in the season
 - ◆ Obtain germination information on seed to be provided
2. Seeds for the parental screening to be sown by the end of May and plants to be planted by mid-October
3. Manage crops to create pollen isolation
 - ◆ Use isolation cages for seed production
4. Effective Crop Husbandry
 - ◆ Plant propagation, sowing/planting and establishment
 - ◆ Mapping – overall plans and single plant maps where appropriate
 - ◆ Crop management - Fertiliser, fungicides, herbicides
 - ◆ Management of pollinators to ensure good yields
 - ◆ Investigation of new pollinators for legume seed production
 - ◆ Development of seed yield screening systems for legume breeding
 - ◆ Identification and removal of volunteers or off types
 - ◆ Rouging/Weeding
 - ◆ Irrigation
 - ◆ Hygienic harvesting
5. Seed Processing/Testing
 - ◆ Undertake hygienic seed cleaning to ensure quality and integrity of seed.
 - ◆ Tagging – appropriate ID and labelling of all material through each step
 - ◆ Test seed for Purity, Germination, 1000 seed weight.
6. Seed Storage
 - ◆ Store seeds in adequate secure containers/bags
 - ◆ Store in appropriate temperature/humidity controlled facilities
 - ◆ Allocate lines with accession numbers and submit sub-samples to the Margot Ford Germplasm Centre where appropriate
7. Records and Reports
 - ◆ Keep a regular diary of events

- ◆ Use a spreadsheet to track and update activities
 - ◆ Prepare an annual report and present to GTL and clients
8. Distribution of seed
- ◆ Package and organise shipment of seeds to clients and also for trials and multiplications where required
 - ◆ Prepare necessary paperwork for phytosanitary certificates for overseas shipments
9. Manage workloads
- ◆ Work with casual staff and other Grasslanz staff to ensure all deadlines regarding delivery are met.
 - ◆ Manage any potential disruptions or bottlenecks likely to impact on output delivery times.
10. Other Seed Production Duties
- ◆ Help other Grasslanz staff as necessary

Seed Legumes Nursery Assistant

The person best suited to this position will possess the following:

Education/Qualifications

- A certificate, diploma or degree in a relevant science field or relevant practical experience
- A current private motor vehicle licence required. Forklift endorsement.
- Grow safe certificate

Knowledge/Experience Required

- Seed Production and Processing practices
- Plant propagation practices and a sound understanding of isolation requirements for out-crossing species
- Sound understanding of plant/seed physiology
- Computer skills with good use of Microsoft Excel
- Some basic knowledge of plant breeding, genomics and biotechnology
- Experience with safe and effective use of agricultural chemicals and their application
- Good writing skills for diary entries and labelling
- Able to work long hours when required during harvesting and seed processing.
- High quality standards and absolute attention to detail are essential.

Competencies required:

Competency	Definition	Key behaviours
Values focused	Demonstrates an understanding of and commitment to AgResearch's Statement of Core Purpose and Statement of Corporate Intent as well as the values encapsulated in The Way We Work principles.	<ul style="list-style-type: none"> • Supports the organisation • Operates with integrity • Discloses own position • Remains open to ideas • Supports others • Maintains professionalism
Communicating	Clearly conveys information and ideas through a variety of media to individuals or groups in a manner that engages the audience and helps them understand and retain the message.	<ul style="list-style-type: none"> • Organises communication • Maintains audience attention • Adapts to the audience • Ensures understanding • Adheres to accepted conventions • Comprehends communication from others
Collaborating	Works effectively and cooperatively with others; establishing and maintaining good working relationships	<ul style="list-style-type: none"> • Establishes good interpersonal relationships • Focuses on shared goals • Volunteers assistance • Shares information • Is self-regulating; • Shares success
Decision making	Secures and compares information from multiple sources to identify business issues; commits to an action after weighing alternative solutions against important decision criteria.	<ul style="list-style-type: none"> • Gathers and organises information • Selects the best alternatives • Demonstrates decisiveness/action • Involves others
Delivering results	Establishes courses of action for self and others to ensure that work is completed efficiently.	<ul style="list-style-type: none"> • Prioritizes • Determines tasks and resources • Schedules • Leverages resources • Stays focused • Takes responsibility • Establishes stretch goals

Values

Adheres to "The Way We Work" principles:

- Maintaining Professionalism
- Sharing Responsibility
- Respecting Each Other
- Being Fair

These are our commitment to each other to foster and sustain a positive, friendly and supportive workplace that nurtures excellence, creativity and successful relationships.