**ANNEXURE F**

**BIOCONTROL RESEARCH, IMPLEMENTATION, AND MASS REARING**

**PROJECT SPECIFICATIONS**

**Project 5: High Elevation, Temperate & Mediterranean Habitats**

1. **SCOPE AND EXTENT OF WORK**

**Section 1:   Pre-release studies**

The pre-release studies will include exploration work and quarantine testing in South Africa on new biocontrol agents on target weeds that have been prioritized by the Department of Forestry, Fisheries and the Environment (DFFE) based on the 20 (twenty) weeds identified by Canavan *et al*., 2021. The list is as follows:

1. *Ailanthus altissima* – Tree of heaven
2. *Robinia pseudoacacia* – Black locust
3. *Genista monspessulana* – Montpellier broom
4. *Hakea drupacea* – Sweet hakea
5. *Pyracantha angustifolia* – Yellow firethorn
6. *Cotoneaster pannosus* – Silver-leaf cotoneaster

The deliverable on this section will be progress achieved per plant species in the quarter.

**Section 2: Post-release evaluation**

The post release evaluation section deals with:

1. quantifying the population impact of the biological control agents released in the past
2. socioeconomic studies and
3. recovery studies.

The following AIS will be the Department’s focus for post release evaluation based on the available budget allocated;

1. *Anredera cordifolia* – Madeira vine
2. *Biancaea decapetala* – Mauritius thorn
3. *Dolicandra unguis-cati* – Cat’s claw creeper
4. *Gleditsia triacanthos* – Honey locust
5. *Hypericum perforatum* – St John’s wort
6. *Cardiospermum grandiflorum* -Balloon vine
7. *Acacia baileyana* – Bailey’s wattle
8. *Acacia cyclops* – Rooikrans
9. *Acacia dealbata* – Silver wattle
10. *Acacia decurrens* – Green wattle
11. *Acacia longifolia* – Long-leaf wattle
12. *Acacia mearnsii* – Black wattle
13. *Acacia melanoxylon* – Black wood
14. *Acacia podalyriifolia* – Pearl acacia
15. *Acacia pycnantha* – Golden wattle
16. Acacia saligna – Port Jackson
17. *Hakea gibbosa* – Rock hakea
18. *Hakea sericea* – Silky hakea
19. *Leptospermum laevigatum* – Australian myrtle
20. *Paraserianthes lophantha* – Stink bean

The deliverable on this section will be progress achieved on points i – iii per quarter.

**Section 3: Mass rearing**

The mass rearing of the agents identified in section 2 over the 5 (five) year period and agents in section 1 as they become available for release.

|  |  |  |  |
| --- | --- | --- | --- |
| **Plant species** | **Estimated no. agents/quarter** | **Total no. agents/year** | **Grand Total** |
| *Anredera cordifolia* – Madeira vine | 375 | 1 500 | 7 500 |
| *Biancaea decapetala* – Mauritius thorn | 100 | 400 | 2 000 |
| *Dolicandra unguis-cati* – Cat’s claw creeper | 3 750 | 15 000 | 75 000 |
| *Gleditsia triacanthos* – Honey locust | 100 | 400 | 2 000 |
| *Hypericum perforatum* – St John’s wort | 100 | 400 | 2 000 |
| *Hakea gibbosa* – Rock hakea\* | 50 | 100 | 500 |
| *Hakea sericea* – Silky hakea\* | 50 | 100 | 500 |
| *Leptospermum laevigatum –* Australian myrtle | 50 | 100 | 500 |
| *Acacia mearnsii* – Black wattle | 100 | 100 | 500 |
| *Acacia longifolia –* Long-leaf wattle | 100 | 100 | 500 |
|  | **Inoculant available per site/quarter** | **Total inoculant available per site/year** | **Grand total** |
| *Paraserianthes lophantha – Stink bean* | 1 | 4 | 20 |
| *Acacia mearnsii* – Black wattle | 50 | 200 | 1 000 |
| *Hakea sericea* – Silky hakea | 50 | 200 | 1 000 |
| *Cardiospermum grandiflorum* -Balloon vine | 5 | 20 | 100 |

\*the agents are only available seasonally

The deliverable under this section will be the number of agents reared per species per quarter.

This deliverable needs to be clearly identified and mentioned on the quarterly report.

1. **COMPETENCY AND EXPERTISE REQUIREMENTS**
2. The bidder is required to demonstrate that they have past and/or ongoing experience and competency in the fields of biocontrol, research, mass rearing or similar.
3. The bidder needs to provide evidence of previous projects successfully completed, including project values, and track records of deliverables achieved.
4. The bidder is required to provide evidence that their team has the relevant technical experience, in research and mass rearing of biological control agents or similar field, required to ensure the deliverables of this work.
5. The bidder is required to provide evidence that their core team has the relevant qualifications required to ensure the efficient delivery of the work.
6. **PROJECT MANAGEMENT AND REPORTING**

The Project Manager shall do the ongoing management of the Service Level Agreement (SLA)/Memorandum of Agreement (MOA).

The appointed service provider shall submit four (4) quarterly reports per year for each of the three (3) EP deliverables as follows; 1. Pre-screening studies, 2. Post-release evaluation and, 3. Mass rearing. Therefore, twelve (12) quarterly reports in total per year will be required.