Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Date:

## Monitoring/Observation of biological control agents - flower bud feeders

Biocontrol Agent:

1. Details of person conducting monitoring (NB)

| Name |  |
| :--- | :--- |
| Address | Fax Number: |
| Telephone | E-mail Address: |
| Organisation |  |

## 2. Location of site

| If a previously registered release site, release record number. |  |
| :--- | :--- |
| Province |  |
| District/Farm Name | $1 / 4^{\circ}$ Square Number |
| Nearest Town | Longitude ( ${ }^{\circ} \mathrm{E}$ ) |
| Latitude ( ${ }^{\circ}$ S) |  |
| Actual Position (give description) |  |

3. Habitat of site (tick appropriate boxes)

| Natural vegetation types | Disturbance/land use | Landform/moisture regime | Aspect |  |
| :---: | :---: | :---: | :---: | :---: |
| Forest | Road/rail side | Watercourse | Direction- N |  |
| Savanna | Around habitation | Wetland | S |  |
| Grassland | Plantation | Dryland/well drained | E |  |
| Karoo | Arable/Ploughed | Kloof/ravine | W |  |
| Fynbos | Pastoral | Rocky site | Steep |  |
| Transformed | Wasteland | Deep sand | Gentle incline |  |

4. Host plant (weed) abundance (circle one appropriate code e.g. (F) )

| $\mathbf{P}=$ Present (abundance uncertain) | $\mathbf{R}=$ Rare (one sighting of one or a few plants) |
| :--- | :--- |
| $\mathbf{O}=$ Occasional (a few sightings of one or a few plants) | F = Frequent (many sightings of single plants of small <br> groups) |
| $\mathbf{A}=$ Abundant (many sightings of clumps or stands) | $\mathbf{V}=$ Very abundant (forming extensive stands) |

5. Insect Presence (circle one code in each line e.g. (Y) )

| Signs of insect feeding: | $\mathbf{Y}=\mathrm{Yes}$ |  |  | $\mathrm{N}=$ No |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| If yes, are the flowers damaged? | $\mathbf{Y}=\mathrm{Yes}$ |  |  | $\mathrm{N}=\mathrm{No}$ |  |
| Damaged flower buds? | $\mathbf{Y}=\mathrm{Yes}$ |  |  | $\mathrm{N}=\mathrm{No}$ |  |
| Life stages seen: | E = Egg batches |  | $\mathbf{N}=$ Nymphs | A = Adults |  |
| Are they being attacked: (e.g. by ants): | N = No |  | Som = Some predation | $\mathbf{S e v}=$ Severe predation |  |
| If yes, by what? |  |  |  |  |  |
| Insect Abundance | P = Abu = Abundant <br> Present (large numbers <br> (abundanc immediately <br> e  <br> uncertain) apparent) | Abu = Abundant (large numbers immediately apparent) |  | Com = <br> Common (easily located in large numbers) | Sca = Scarce (sparse, difficult to find) |
| Monitoring effort |  |  |  |  |  |

6. Damage to weed (circle one appropriate code e.g. Tr)

| Tr = Trivial (infrequent signs of damage) | Mod = Moderate (Frequent signs of damage, plants unstressed) |
| :--- | :--- |
| Con = Considerable (signs of stress or some <br> deformation) | Ext = Extensive (host obviously stressed or extensively <br> deformed) |

Tot = Total (host plants dead, total collapse of weed population)
Contributors: DEA: NRM (Debbie Muir), PPRI and SAPPI (Wayne Lotter)

