# **Biological Control of Weeds Recovery Sheet**

(Please refer to the back of this sheet for instructions)

Site name: Organisation: Observer(s): Date: Time of day:

### **Current weather conditions**

- 1) Sunny / Partly / Overcast / Rain
- 2) Strong wind / Light wind / Calm
- 3) Temperature (°C) < 10 / 10-15 / 15 -20/ 20 -25 / >25

#### **Insect information**

- 4) Number of shoots with scales: Scales:
- 5) Time spent searching (mins):
- 6) Furthest distance insect found from release point (m):

None Found / <20 / 20-50 / 50-100 / 100-300 / 300-500 / Further?

7) Overall damage: None / Occasional / Patchy / Heavy / Severe

#### Weed Information

- 8) Infestation: Major (as far as eye can see) / Moderate (>100m<sup>2</sup>) / Minor (<100m<sup>2</sup>)
- 9) Percentage cover at densest accessible point:
- 10) Average height of plants at densest accessible point: <1 m / 1-2 m / >2 m
- 11) Photos taken: Yes / No 12) Photo compass bearing:
- 13) GPS for photopoint: 14) Photo file name:

#### **Comments**

15) Have any of the following happened to the site recently?

Mowing / Spraying / Grazing / Flood / Drought / Fire / Other?

16) Please use the back of this sheet to record any further observations or comments about the site, including any checks for non-target damage.



Giant reed scale insect (*Rhizaspidiotus donacis*)



Manaaki Whenua Landcare Research

#### **INSTRUCTIONS FOR FILLING OUT THIS SHEET**

### (Please note that it is important to complete these questions in order)

## Where choices are given mark the correct answer by bolding or highlighting it or by deleting the other options.

- **Site Name** please be consistent in the use of site names to prevent confusion.
- > **Organisation** the name of your organisation.
- > **Observer(s)** the names of people who helped with this recovery not onlookers.

# Current Weather Conditions

1-3) Choose the words that best describe the weather conditions.

# Insect information

4) Mature females are immobile and appear as circular brown/black waxy caps with white tips reaching approximately 2.5 mm in width. Scale insect juveniles known as crawlers and mature males are microscopic so difficult to detect. Mature males are winged. Look at any time of the year for female scale insects attached to the plant around leaf collars and axillary leaf sheaths at the base of lateral shoots. You may see a black clump of multiple female scales at the base of a lateral shoot when they reach large numbers (Fig. A). They may cause stunting or a 'witches broom' appearing deformity of these lateral shoots or prevent the growth of one alterether. They also accurs an the whitewever of the



- growth of one altogether. They also occur on the rhizomes of the plant in the ground.
- 5) Record how long you spent actively searching.
- 6) If you have time to look further afield we would like to know how far away from the release point you can find adults or larvae.
- 7) Record the amount of damage seen overall at the site: occasional (signs of damage present but not common), patchy (signs of damage are present but are variable throughout the site, some plants may have no damage, and others may have heavy damage but this would be rare), heavy (the majority of plants are showing signs of damage and at least some plants are beginning to show signs of severe damage or stress), and severe (severe damage is obvious and widespread).

#### Weed Information

- 8) Estimate and record the approximate size of the infestation using the categories provided.
- 9) Estimate the percentage cover of giant reed at the densest accessible point over an area of 10 x 10m, or if the site doesn't lend itself to a square use an equivalent sized shape.
- 10) Estimate the average height of giant reed at the densest accessible point and select appropriate option.
- 12) Please indicate if you have taken photos.
- 12-14) If you have taken photos please record the photo compass bearing, the GPS point, the file name for the photo and attach hard or digital copies to this form if you can.

#### **Comments**

- 15) Please indicate if any of these important events have happened to the site.
- 16) Tell us any other important information we should know about the site (e.g. whether you have been harvesting for release at new sites). Use the bottom of this page if you need extra space.