Matted Flax-lily (Dianella amoena) Translocation: Monitoring Spring/Summer 2011-2012

Project: 09-008

Prepared for:

Melbourne Water Corporation

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Summary

This report documents monitoring of Matted Flax-lily (*Dianella amoena*) plants on the Sugarloaf Pipeline easement, south of Gibbs Road, Yarra Glen, undertaken in January - May 2012. The site is a plot measuring 120 x 3 m. These plants were propagated from parent plants salvaged from the easement before construction of the North South Pipeline in 2009. A total of 1172 plants were planted-out in March 2010 and these were documented at the time of planting.

Plants were monitored in four sub-plots (distributed along the fenced site) representative of the larger population; in all the performance of 104 plants has been monitored, including lateral expansion, (by rhizomes), number of shoots and leaves per shoot, length of leaves and dimensions of inflorescences.

Management issues were noted.

Matted Flax-lily plants were also monitored at Hunts Lane south, Melba Highway, Steels Creek, where they were replanted after being 'salvaged' in error; and Hybrid Flax-lily (*Dianella amoena* x *D. admixta*) plants were monitored at Hunts Lane north (Melba Highway) which were also 'salvaged' in error and then replanted. Other *Dianella amoena* populations, also intended for monitoring according to the formal Agreement, could not be located and it is assumed that they have become extinct at these roadside sites because of weed invasion as well as slashing.

The performance of Matted Flax-lily plants on the Sugarloaf Pipeline easement has been very variable despite the generally excellent growing seasons since plant-out in March 2010. At best there has been very good growth and flowering and fruiting with very low mortality. At worst the performance has been very poor with relatively high mortality, a much reduced growth performance and much reduced flowering. These poor responses undoubtedly result from very serious weed invasion which now has 100% cover over a substantial portion of the site. Numerous weed species were recorded on site and there has been little weed management. It is concluded that weed invasions will eventually destroy the *Dianella* population without concerted, high-quality weed control.

Apart from the weed management on and surrounding the site – overwhelmingly the most important management issue – other issues include garden snail management, and maintenance of the fence and shade cloth, and effective secure labelling of plants.

The Hunts Lane north and south populations have performed very poorly because of weed invasion and slashing. A high mortality has resulted, growth was very poor and no plants flowered.

These plants are in extreme jeopardy without effective management.

1 Introduction

Ecology Australia was commissioned by the Sugarloaf Pipeline Alliance (SPA) in March 2010 to plant 1172 *Dianella amoena* (Matted Flax-lily) plants at the receptor site just to the south of Gibbs Road, Yarra Glen. These plants had been salvaged from parent material (between eight to ten genetically distinct parent plants) within the approved Construction Area of the pipeline easement (refer to Draft Matted Flax Lily - Translocation Commitment Document, SPA-REP-GL-ENV-Rev A).

A monitoring report was produced by Ecology Australia (Carr and Rodda 2011) in April 2011 which gave the:

- results for the second round of monitoring (January 2011) of these translocated plants; and
- recommendations for environmental management of the receptor site, to ensure the health and viability of translocated Matted Flax-lilies;
- comments on the in situ *D. amoena* population on Gulf Road, Yarra Glen which were not removed.

This current report documents the results of the January - March 2012 monitoring of *Dianella amoena* plants at the Yarra Glen receptor site and also the monitoring of two *Dianella* populations to the immediate north and south of Hunts Lane, Steels Creek. At the former site *Dianella* plants were wrongly salvaged in 2009. Originally considered to be *D. amoena*, these subsequently proved to be hybrids - *D. admixta* x *D. amoena*. Propagated plants were replanted in March 2010. The site to the south of Hunts Lane also had *D. amoena* plants wrongly 'salvaged', but also subsequently replanted in March 2011.

The brief given in the *Commitment Document No. SPA-GL-ENV-001 Rev. D - Version 01* identifies the sites where in situ *D. amoena* populations have been recorded and which also require monitoring as 'controls' against which the translocated population can be evaluated. These are (or were) on roadsides as follows:

- Maroondah Aqueduct (east side), approximately 30 m north of Yarraview Road (1 patch);
- Melba Highway (east side), adjacent to property no. 650, approximately 1 km north of Gulf Road (3 patches); and
- Patch 8 on Melba Highway (west side), approximately 150-175 m south of Hunts Lane (1 patch).

During field work these populations; except for the last population (Patch 8 Melba Highway) could not be found. It is assumed that plants no longer exist, that is they have become extinct because of a combination of mowing (slashing) of the road reserves - now the routine practice along most roadsides in the Shire - coupled with weed invasions, mostly grasses. A similar fate befell Matted Flax-lily (subpopulations) Patches 5, 6 and 9 on Gulf Road (Commitment Document Rev D - Version 01, page 14) as discussed in the 2010-2011 monitoring report by Ecology Australia (Carr and Rodda 2011).

In view of the apparent demise of these populations it was not possible to fulfil the monitoring brief outlined in the Commitment Document; nor will it be possible to accommodate the monitoring advocated in the 5-year brief for the Matted Flax-lily. The present report documents the results of the 2011-2012 spring/summer monitoring of *D. amoena* at the Gibbs Road translocation site, as well as the two Melba Highway (Hunts Lane) populations.

1.1 Study area

The *Dianella amoena* receptor site is located just to the south of Gibbs Road, Yarra Glen, within the Sugarloaf Pipeline easement, and measures c. 120 m x 3.0 m (Figure 1). It is fenced with a conventional farm fence with the addition of shade cloth. The southern boundary abuts private land with a narrow plantation of small trees which include Silky Oak (*Grevillea robusta*), Oak (*Quercus* sp.), Yellow Gum (*Eucalyptus leucoxylon*) and Red Gum (*E. camaldulensis*). The plantation and the adjoining pasture are grazed by stock (cattle, sheep and one alpaca).

2 Methods

The information given below in respect of propagation (Section 2.1) and plant-out (Section 2.2) are included as background information from the former report (2010-2011 monitoring: Carr and Rodda 2011).

2.1 Propagation

Following the excavation of parent *Dianella* material, the plants were separated into over 2,000 ramets and were taken to a native plant nursery (as per Matted Flax-lily Translocation Commitment Document; SPA-REP-GL-ENV-001-Rev01 plant). Ramets were planted into containers approximately 7 cm diameter x 10 cm deep. The 2,000+ divisions were then left to grow in the tubestock containers at the nursery. Following the completion of construction activities and appropriate reinstatement of the receptor site, Ecology Australia was contacted to determine an appropriate date for plant out (19 – 26 March 2010). The dates proposed by Ecology Australia to commence planting coincided with autumn-breaking rains, ensuring the receptor site had received adequate rainfall and was suitable to receive the plants. Necessary arrangements were then made to transport approximately half (1172) of the 2000+ plants from the nursery to the receptor site.

2.2 Plant-out

Prior to plant-out, Ecology Australia inspected the receptor site and it was determined from this inspection that the following actions required to be undertaken:

- Rotary-hoe the loamy soil;
- Remove weeds from within the receptor site by hand removal;
- Remove weeds growing along the northern fence line outside the receptor site; and
- Install a sediment fence (shade cloth) along the southern fence line (i.e. external Right of Way fence line) to reduce the potential for weeds from the adjacent paddock entering the receptor site.

Once the above actions had been completed, plants were planted at evenly/spaced intervals within the receptor site (Figures 2a - 2d). A hole was dug slightly deeper than the root ball of each plant so a depression could be left around the top of the newly planted *Dianella amoena* and the existing ground surface. This was done to ensure that any water (i.e. rainfall or via hand watering) would be contained in this depression and slowly soak into the root zone of each plant. A total of 1172 plants of *Dianella amoena* plants were planted at the receptor site between 22 – 26 March 2010.

Adequate rainfall during April 2010 ensured that the all planted *Dianella* received much of their water requirements, reducing the need for hand watering. As a result, establishment was rapid and survival was excellent (100%) with noticeable growth (elongation of leaves, emergence of new shoots) commencing within the first week of translocation.

2.3 Monitoring

Following plant-out on 22-26 March 2010 (as outlined above in Section 2.2) formalised monitoring was conducted. The original monitoring results presented in the first of the monitoring reports – the Autumn/Winter 2010 report (of 27/10/10) (Kershaw and Carr 2010) reflect the data agreed to by SPA in consultation with DEWHA (Matted Flax-lily Translocation Commitment Document; SPA-REP-GL-ENV-001-Rev D - Version01):

- **Locations/ coordinates** – collected for individual plants using a Real Time Kinematic Global Positioning System (datum MGA94);
- **Basal diameter of plant** – measured at soil level to the outside if the outermost shoots (in cm);
- **Number of shoots**[1] **-** counted as accurately as possible within a single plant, without disturbing the plant[2]
- **Maximum leaf length –** measured from the soil level to leaf apex (in cm.)
- **Number of leaves per shoot –** the range of number of leaves per shoot were recorded (e.g. 2 – 6 leaves on shoot A; 3- 9 leaves on shoot B)
- **Height of inflorescence/ infructescence –** for fertile plants, this was measured in cm. from the soil level up to the tip of the peduncle
- **Presence of flower buds –** recorded as a simple presence / absence
- **Stage of flowering –** assessed subjectively as: early mid or late
- **Stage of fruiting –** assessed subjectively as: early mid or late.

[1] Each shoot represents a rhizome branch bearing leaves, and if fertile an inflorescence or infructescence.

[2] To accurately determine the number of shoots, soil would have to be removed from the base of each plant. This was not done as it was deemed to be too invasive.

2.4 Representative quadrats (subplots)

Documenting of all of the 1172 *D. amoena* plants translocated to the receptor site was given in the consultants Autumn/Winter report (Kershaw and Carr 2010) as is reproduced here as Appendix 1. However it was then deemed by the consultants to be unwarranted to continue monitoring the full population. Rather, it was decided in future to monitor the performance of a representative subset of the plants, the data from which monitoring would be representative of the survival and performance of the full translocated population. Observations of plants on the whole plot have since confirmed that the plants on the subplots are representative of the whole population. Accordingly, it was decided to set up four permanent subplots evenly distributed along the receptor site (Figure 1, 2a - 2d) each measuring 3 x 2.7 m (i.e. the full width of the receptor site). In each of the permanent plots, all 104 *D. amoena* plants (27, 26, 17 and 34 plants respectively in plots 1 – 4) which represented 8.8% of the total population, were documented, to be followed by subsequent monitoring.

Data from these subplots were given in Appendix 4 of the earlier report. The plant number and location of planted *D. amoena* in each subplot is shown in Figures 2a - 2d. The data presented in the 2010 - 2011 report were collected according to the above protocols on the four subplots; the data were collected on 11 January 2011 and the reporting of the current 2011-2012 data - the spring-summer monitoring - was based on field work carried out on January to March 2012. Additionally all plant species recorded in the plant-out site were listed and assigned a cover value from the Braun-Blanquet cover/abundance scale (see below). This is in fact a large quadrat and the data on plants other than *D. amoena* were collected to indicate weeds of management concern and indigenous species colonising the site.

Braun-Blanquet cover/abundance scale

+	cover < 5%, few individuals
1	cover < 5%, any number of individuals
2	cover 5-20%, any number of individuals
3	cover 20-50%, any number of individuals
4	cover 50-75%, any number of individuals
5	cover 75-100%, any number of individuals

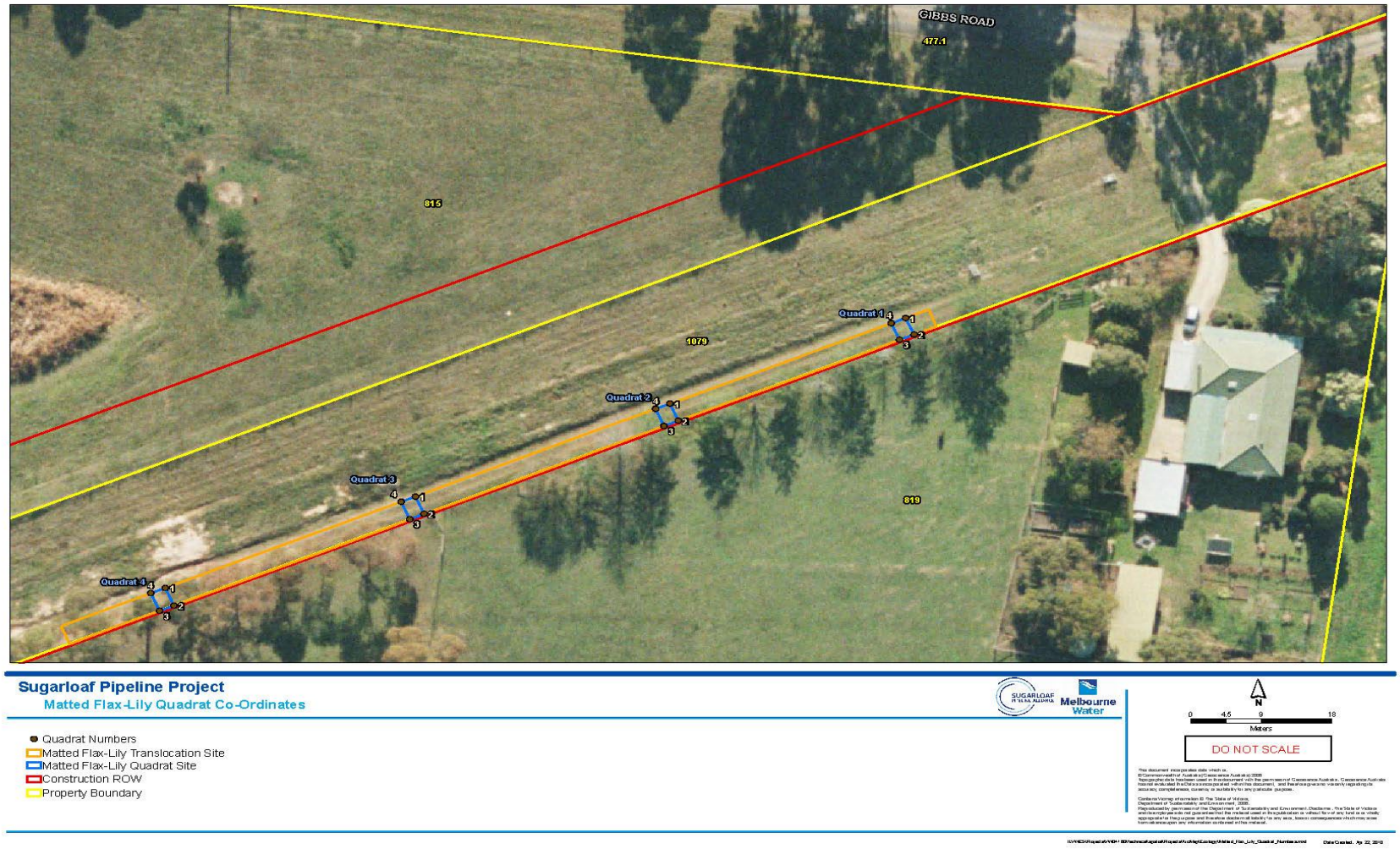

Figure 1 *Dianella amoena* plant-out site, North-South Pipeline easement, Yarra Glen, April 2010

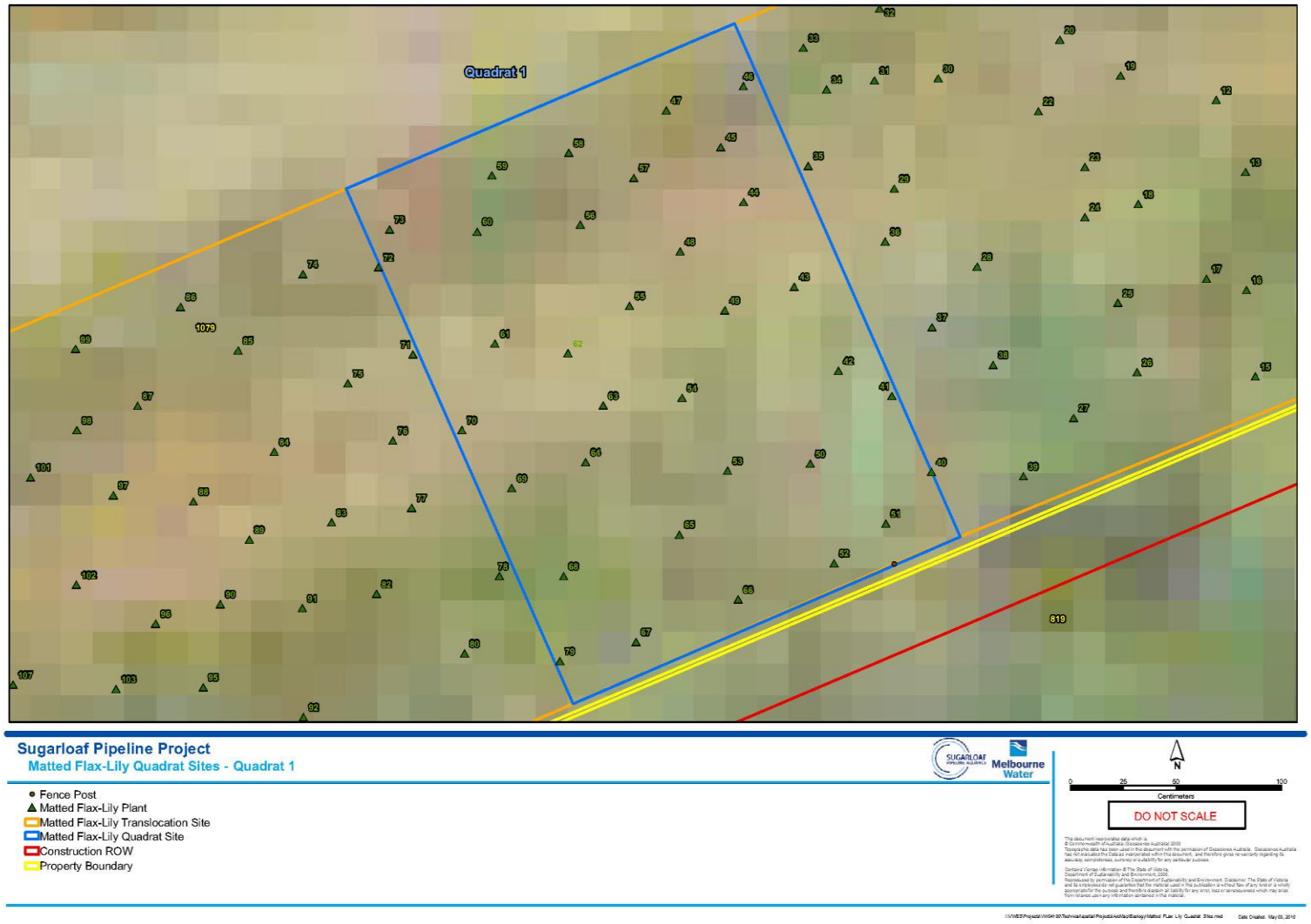

Figure 2a Quadrat 1 (subplots) in the *Dianella amoena* plant-out site, North-South Pipeline easement, Yarra Glen, April 2010

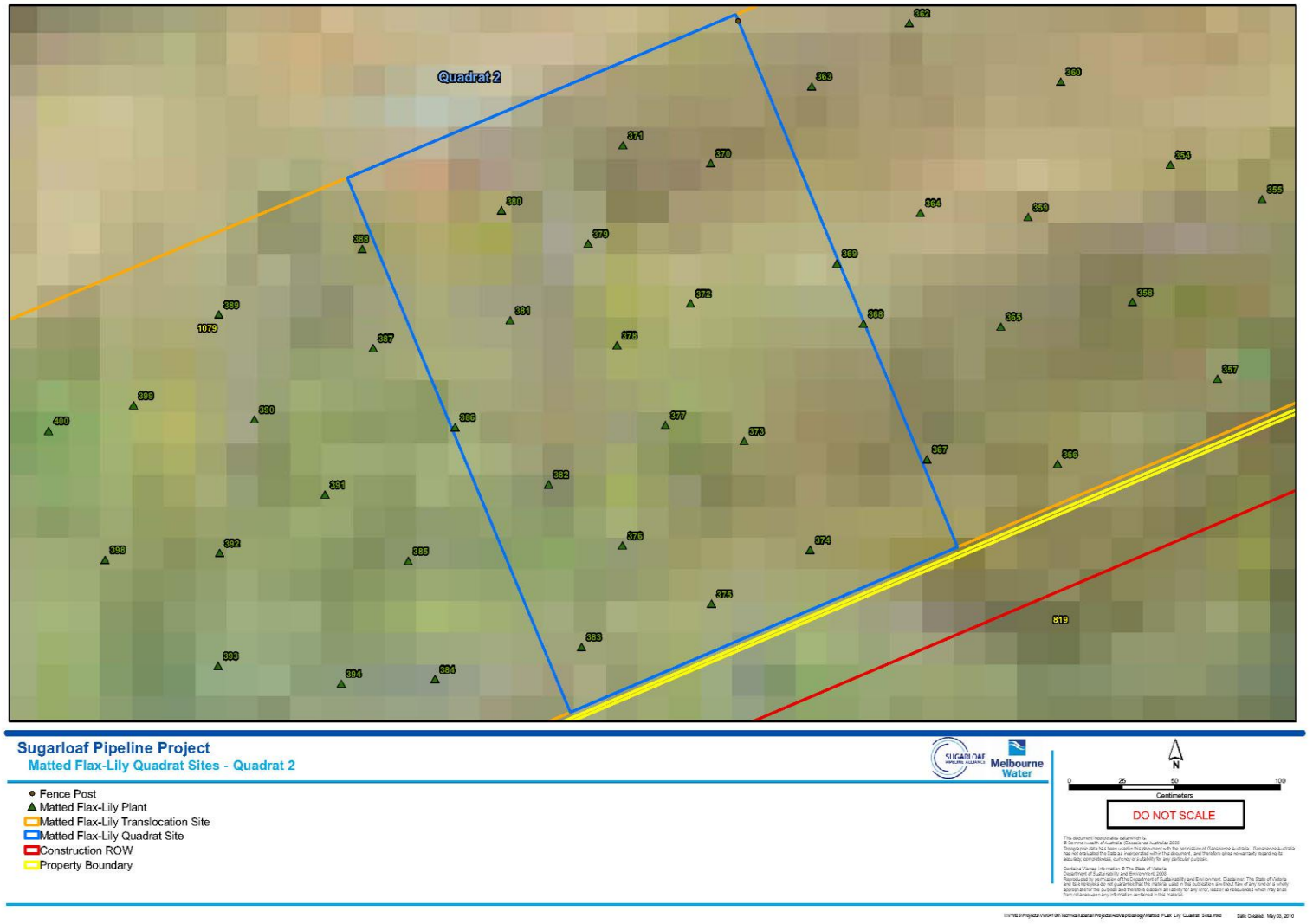

Figure 2b Quadrat 2 (subplots) in the *Dianella amoena* plant-out site, North-South Pipeline easement, Yarra Glen, April 2010

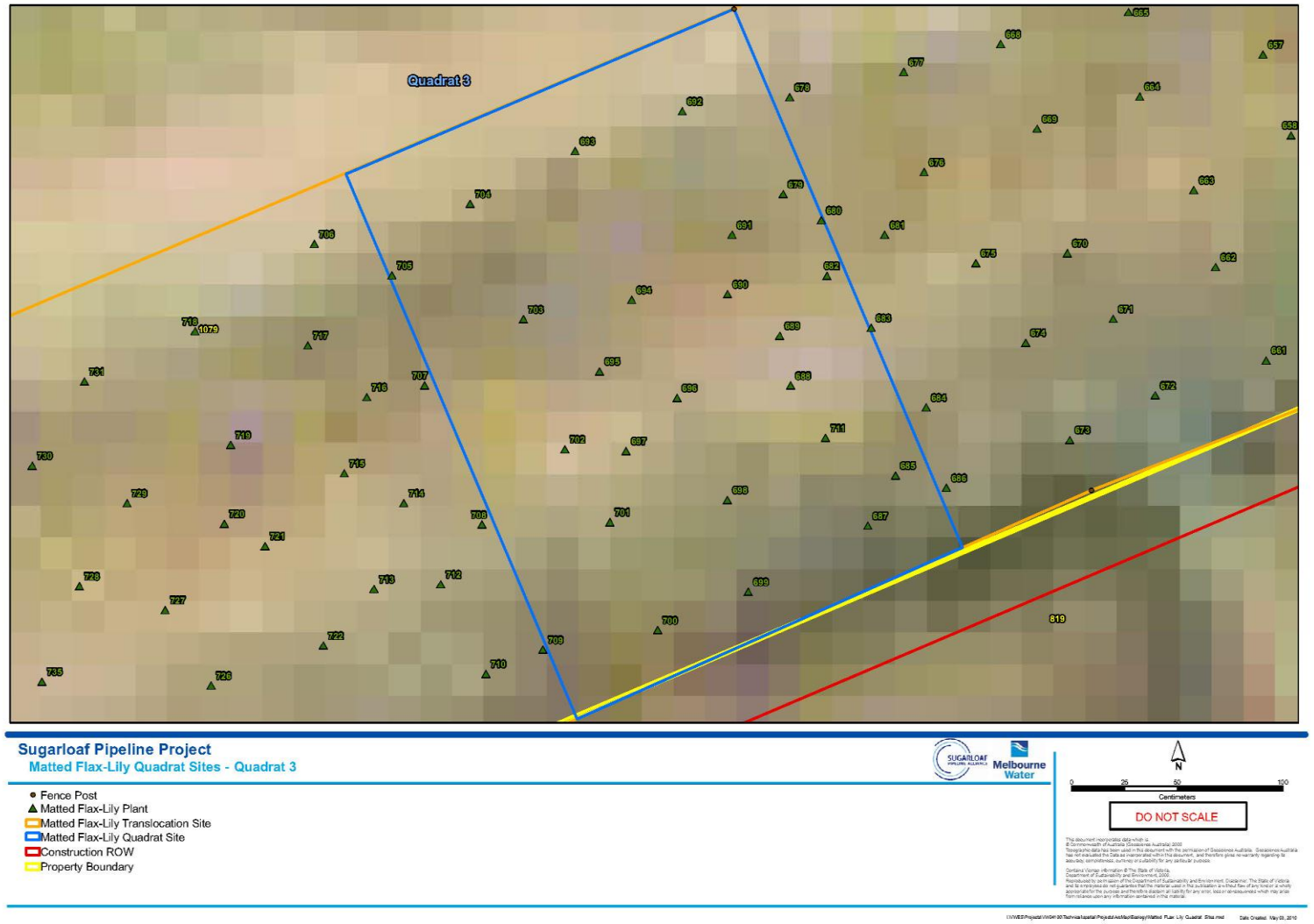

Figure 2c Quadrat 3 (subplots) in the *Dianella amoena* plant-out site, North-south Pipeline easement, Yarra Glen, April 2010

Figure 2d Quadrat 4 (subplots) in the *Dianella amoena* plant-out site, North-South Pipeline easement, Yarra Glen, April 2010

2.5 Plant names

Names for indigenous and exotic plant species in this report follow *A Census of the Vascular Plants of Victoria* by Walsh and Stajsic (2007) with several informal names as used by Ecology Australia unpublished. An asterisk * denotes exotic species.

3 Results and discussion

The data for the original plant-out are given in Appendix 1 including the co-ordinates for each of the plants and size and flowering.

3.1 Gibbs Road receptor site

The data collected for *Dianella amoena* plants in each of the four subplots at the plant-out site in January to March 2012 are given in Appendix 2 alongside the data for the 2011 monitoring to allow easy comparison. Data on the indigenous plants and the exotic weed flora colonising the site (measuring 120 x 3m = 360 m^2) in January 2011 and January 2012 are similarly presented together in Appendix 3 to allow easy comparison. The indigenous and exotic plant species recorded on the four subplots are given in Appendix 4.

3.1.1 *Performance of Dianella amoena plants*

The data given in Appendix 2 indicate the trends outlined below in survival, growth and reproductivity of *Dianella amoena* plants: The performance of *Dianella amoena* plants (Appendix 2), as determined by the 2012 monitoring, indicates a varying response attributable to the extent of weed invasion which is highly variable across the site. The highest cover of weeds (c. 100%) occurred in the lower section of the plant-out site where the adjoining plantation trees (eucalypts) have been killed by ringbarking stock. High weed invasion here corresponds with an absence of competition by the trees (for light and water). The data on performance of the 104 *D. amoena* plants (Appendix 2) are not analysed in detail here but the trends are indicated. In both vegetative and flowering/fruiting responses, the general responses on Plots 1, 2 and 4 are indicative of excellent growing conditions in the last two seasons. This is reflected in: survivors; the extent of lateral growth of plants (expansion by underground rhizones), in the increasing number of shoots leaf length and number of plants flowering as well as the height of inflorescences/infructescences. Almost all plants except in very weedy sites increased in diameter by 0.7-8 times, the largest diameter reached being 54 cm in several plants on separate plots. *Dianella amoena* is an extensive rhizomatous species and plants can ultimately grow to about 10 m wide (Carr and Horsfall 1995). The number of shoots per plant typically increased from 2-12 times that of last year. The maximum leaf length for most plants was longer than that of last year.

Flowering and fruiting at best was excellent with more plants flowering this season compared with last season, and with more inflorences and larger inflorences than last year.

In 2011 50 plants flowered on Plot 1 and all 68 flowered in 2012 with very robust inflorences to 110 cm high. On Plot 2, 17 (of 20 plants) flowered in 2012 compared with 12 last year, and on Plot 4 a total of 18 flowered this year compared with 21 last year, a poorer response similarly attributed to weed invasion.

Plot 3 had the worst performance - because of weed invasion - and there was a mortality of 5 of the 33 plants. Growth was poorer, including lateral expansion and number of shoots per plant; these figures showed regression in growth in a number of plants. Of the survivors, 17 flowered last year but only 14 this year, clearly defying the trends exhibited, for example in Plot 1.

Plants were in general highly reproductive with a protracted flowering season that extended from October to April. Flowering typically ends to January, ceasing with the onset of summer dryness. Fruit production was outstanding and this indicates that the bee pollinators are active on the site. No recruitment from seed has been observed but there is little space for further recruitment and all sites outside the plot are unsuitable for *Dianella* recruitment and/or survival.

All the observations and data indicate that weed management is urgently required and that plants will be lost progressively without effective management.

3.2 Hunts Lane, Melba Highway, *Dianella* populations

3.2.1 Hunts Lane north

The population on the north side of Hunts Lane (Hunts Lane north population) is comprised of replanted *Dianella amoena* x *D. admixta* (Hybrid Flax-lily) plants (ex nursery). The site has not been managed for weeds and it was slashed, apparently in December 2011. There is quite severe competition from weeds, mainly grasses, as well as indigenous plants, notably Weeping Grass (*Microlaena stipoides*). Some of the labels marking the 20 plants have been damaged by slashing and it has been difficult to monitor plants. The data from monitoring (17 May 2012) are given in Appendix 4.

The vegetation at the site was documented on 16 March 2012 by collection of quadrat data and these data are given in Appendix 5.

It is self-evident from the data regarding plant performance (Appendix 4) that the hybrid *Dianella* plants at the site are performing poorly in the face of competition from weeds and indigenous grasses particularly. The original parent hybrid *Dianella* persists on the site around the base of the eucalypt trees.

3.2.2 Hunts Lane south

The plants here are planted-out *Dianella amoena* but the site is extremely weedy as the vegetation documentation - collection of quadrat data on 16 March 2012 - shows (see Appendix 5). The data from the monitoring of the plants are given in Appendix 6. It has not been possible to find any more than a few *Dianella* plants and all of these were very small, without evidence of flowering and suffering from intense competition. If these plants are to persist on the site urgent attention is required to manage weed invasions. The original *D. amoena* plants persist at the base of the (now dead) Narrow-leaf Peppermint (*Eucalyptus radiata* ssp. *radiata*) trees.

3.3 In situ sub-populations of *Dianella amoena*

The in situ sub-populations in the Gulf Road road reserve at Maroondah Aquaduct and Melba Highway were intended for monitoring according to the Agreement. The sites were inspected on 2 February 2011 and in February 2012 but no evidence of *Dianella* was seen, we believe for several reasons: most of the sites have been slashed and of those, or partially unmown remaining unmown, they were covered by a dense growth of exotic grass (predominantly Cocksfoot, **Dactylis glomerata*). Growing conditions in the last two years have been extraordinarily favourable for weed growth, particularly on the fertile soils locally. *Dianella amoena* can easily become extinct on these highly vulnerable road-reserve populations.

3.4 Weed invasions on the Sugarloaf Pipeline easement plant-out site

Weeds in this context are plant species that require management because of adverse or potentially adverse competition to *D. amoena* plants. The species include indigenous plants that have colonised the site from soil-stored seed, and seed that has been dispersed to the site by birds, wind or other factors, possibly including people and contaminated equipment. Similar origins apply to the exotic flora.

The weed flora and indigenous flora on the site was species rich and with high cover, though the cover varied considerably across the site. Table 1 lists plant species recorded in 2011 and 2012 for comparison and the following statistics indicate the situation:

Total plant species recoded over the site:

- 2011 - **73** species (29 indigenous *44 exotic)
- 2012 - **74** species (24 indigenous *50 exotic)
- **12** species recoded 2011 but not in 2012 (10 exotic 2 indigenous)
- **17** species recorded 2012 but not in 2011 (13 exotic 4 indigenous)
- Number of plant species requiring management as weeds - exotic species or undesirably competitive indigenous species: **36** species.

The cover of weeds recorded across the site indicates that weed management has been inadequate with little evidence of much control having been carried out. There was very uneven cover of weeds across the site and this is attributed to the competitive interactions from the trees in the plantation adjoining the plot. At the eastern end and the extreme western end with high cover of trees next to the plot, the weeds had much reduced cover, and correspondingly a much better performance of *Dianella* plants. Where trees in the plantation are absent, dead (they have been killed by stock ringbarking them) or sparse, the adjoining plot was very heavily weed-invaded with obvious negative impacts to *Dianella* plants. (Plates 1 and 2).

It appears evident that there has been some mortality in *D. amoena* plants attributable to weed competition, and the growth of plants as well as flowering, has been very poor. These observations indicate that weed invasion on the site will substantially destroy the *Dianella* population in a few years without timely, high-quality, ongoing weed management. Replacement of dead plants is appropriate, but only after the weed populations have been effectively dealt with.

Table 1 Plant species recorded in the Matted Flax-lily (*Dianella amoena*) receptor site, Sugarloaf Pipeline easement, Yarra Glen, 11 January 2011 and 13 January 2012.

M: species which require management
An asterisk (*) indicates exotic species

Scientific name	Common name	Family name	Cover / abundance Value	
			11 Jan 2011	13 Jan 2012
Acacia mearnsii M	Late Black Wattle	Mimosaceae	1	1
Acacia verticillata ssp. *verticillata* M	Prickly Moses	Mimosaceae	+	+
**Acetosella vulgaris* M	Sheep Sorrell	Polygonaceae	1	2
**Agrostis capillaris* M	Brown-top Bent	Poaceae	2	2
**Agrostis stolonifera* M	Creeping Bent	Poaceae	-	1
**Anagallis arvensis* var. *arvensis*	Pimpernel	Primulaceae	1	1
**Anthoxanthum odoratum* M	Sweet Vernal-grass	Poaceae	1	2
**Arctotheca calendula* M	Cape Weed	Asteraceae	1	+
Austrodanthonia caespitosa	Common Wallaby-grass	Poaceae	-	1
Austrodanthonia duttoniana	Brown-back Wallaby-	Poaceae	-	1
Austrodanthonia fulva	Copper-awned Wallaby-	Poaceae	1	1
Austrodanthonia pilosa	Velvet Wallaby-grass	Poaceae	-	2
Austrodanthonia racemosa	Slender Wallaby-grass	Poaceae	1	1
Austrodanthonia setacea	Bristly Wallaby-grass	Poaceae	1	2
Austrosptipa rudis ssp. *rudis*	Veined Spear-grass	Poaceae	-	+
**Briza minor*	Lesser Quaking-grass	Poaceae	-	1
**Bromus catharticus* var. *cartharticus* M	Prairie Grass	Poaceae	1	1
**Bromus hordeaceus* ssp. *hordeaceus*	Soft Brome	Fabaceae	-	1
**Cardamine hirsuta*	Bitter Cress	Brassicaceae	1	-
Carex breviculmis	Common Grass-sedge	Cyperaceae	-	+
Carex inversa s.l. (mat-forming)	Common Sedge	Cyperaceae	1	1
Carex inversa s.l. (tussock-forming)	Knob Sedge	Cyperaceae	-	+
**Centaurium tenuiflorum*	Slender Centaury	Gentianaceae	-	1
Centipeda cunninghamii	Common Sneezeweed	Asteraceae	+	+

Scientific name	Common name	Family name	Cover / abundance Value	
			11 Jan 2011	13 Jan 2012
Chenopodium pumilio	Clammy Goosefoot	Chenopodiaceae	1	-
**Cirsium vulgare* M	Spear Thistle	Asteraceae	+	+
**Conyza sumatrensis* M	Tall Fleabane	Asteraceae	-	+
**Cynodon dactylon* var. *dactylon* M	Couch	Poaceae	1	1
**Cyperus eragrostis* M	Drain Flat-sedge	Cyperaceae	1	1
**Dactylis glomerata* M	Cocksfoot	Poaceae	1	1
Dianella amoena	Matted Flax-lily	Hemerocallidaceae	2	1
Dianella amoena x *D. admixta*	Hybrid Flax-lily	Hemerocallidaceae	-	1
Dichondra repens	Kidney-weed	Convolvulaceae	1	1
**Ehrharta erecta* var. *erecta* M	Panic Veldt-grass	Poaceae	1	1
Epilobium billardierianum ssp.	Smooth Willow-herb	Onagraceae	-	+
Epilobium billardierianum ssp.	Variable Willow-herb	Onagraceae	1	1
Epilobium hirtigerum	Hairy Willow-herb	Onagraceae	1	1
**Epilobium ciliatum*	Glandular Willow-herb	Onagraceae	-	+
**Eucalyptus camaldulensis* M	River Red-gum	Myrtaceae	1	1
**Eucalyptus leucoxylon s.l.* M	Yellow-gum	Myrtaceae	-	+
Euchiton involucratus	Star Cudweed	Asteraceae	-	+
Euchiton sphaericus	Annual Cudweed	Asteraceae	2	1
**Euphorbia peplus* M	Petty Spurge	Euphorbiaceae	2	1
Exocarpos cupressiformis	Cherry Ballart	Santalaceae	-	+
**Fraxinus angustifolia* ssp. *angustifolia*	Desert Ash	Oleacea	-	1
Geranium sp. *2*	Crane's-bill	Geraniaceae	1	1
**Helichrysum luteoalbum*	Jersey Cudweed	Asteraceae	1	+
**Holcus lanatus* M	Yorkshire Fog	Poaceae	1	2
Hypericum gramineum s.l.	Small St John's Wort	Clusiaceae	1	1
**Hypochoeris radicata* M	Flatweed	Asteraceae	1	1
Juncus amabilis M	Hollow Rush	Juncaceae	-	1
Juncus gregiflorus M	Green Rush	Juncaceae	-	
Juncus pallidus M	Pale Rush	Juncaceae	-	+
Juncus sarophorus M	Broom Rush	Juncaceae	-	1

Scientific name	**Common name**	**Family name**	**Cover / abundance Value**	
			11 Jan 2011	13 Jan 2012
Juncus sp.	Rush	Juncaceae	1	-
Juncus subsecundus	Finger Rush	Juncaceae	1	1
Kunzea ericoides s.l. M	Burgan	Myrtaceae	1	+
Lachnagrostis filiformis	Common Blown-grass	Poaceae	1	1
**Lactuca serriola* M	Prickly Lettuce	Asteraceae	-	+
**Leontodon taraxacoides* subsp.	Hairy Hawkbit	Asteraceae	1	1
**Lolium perenne* var. *perenne* M	Perennial Rye-grass	Poaceae	1	1
**Lotus aliginosus* M	Bird's foot Trefoil	Fabaceae	-	1
**Lotus corniculatus* M	Bird's-foot Trefoil	Fabaceae	-	+
**Lotus* sp. (naturalised) M	Trefoil	Fabaceae	1	-
Lythrum hyssopifolia	Small Loosestrife	Lythraceae	1	1
Microlaena stipoides var. *stipoides*	Weeping Grass	Poaceae	1	1
**Modiola caroliniana*	Red-flower Mallow	Malvaceae	1	-
**Oxalis corniculata*	Creeping Wood-sorrel	Oxalidaceae	-	+
Oxalis exilis	Shady Wood-sorrel	Oxalidaceae	1	1
Oxalis aff. exilis (glabrescent)	Small-flower Wood-sorrel	Oxalidaceae	1	-
Oxalis sp.	Wood Sorrel	Oxalidaceae	1	-
**Panicum hillmanii*	Witch Panic	Poaceae	+	-
**Paspalum dilatatum* M	Paspalum	Poaceae	1	1
**Paspalum distichum* M	Water Couch	Poaceae	1	-
**Plantago coronopus*	Buck's-horn Plantain	Plantaginaceae	1	+
**Plantago lanceolata* M	Ribwort	Veronicaceae	1	1
**Poa annua*	Annual Meadow-grass	Poaceae	1	-
Poa labillardieri var. *labillardierei* M	Common Tussock-grass	Poaceae	+	1
Poa morrisii	Soft Tussock grass	Poaceae	-	+
**Poa pratensis* M	Meadow-grass	Poaceae	+	-
Poa sieberiana var. *sieberiana*	Grey Tussock-grass	Poaceae	-	+
**Polygonum aviculare*	Hogweed	Polygonaceae	+	+
Portulaca oleracea	Common Purslane	Portulacaceae	1	-
**Rubus anglocandicans* M	Blackberry	Rosaceae	-	+

Scientific name	Common name	Family name	Cover / abundance Value	
			11 Jan 2011	13 Jan 2012
**Romulea rosea* var. *australis*	Common Onion-grass	Iridaceae	1	1
**Rumex conglomeratus*	Clustered Dock	Polygonaceae	+	+
Schoenus apogon	Common Bog-sedge	Cyperaceae	1	1
Senecio quadridentatus	Cotton Firewood	Asteraceae	-	+
**Setaria parviflora* M	Slender Pigeon Grass	Poaceae	1	1
**Sisyrinchium iridifolium*	Blue Pigroot	Iridaceae	1	1
**Solanum nigrum*	Black Nightshade	Solanaceae	1	-
**Sonchus asper .*	Rough Sow-thistle	Asteraceae	1	1
**Sonchus oleraceus*	Common Sow-thistle	Asteraceae	2	1
**Stachys arvensis*	Stagger Weed	Lamiaceae	1	1
**Stellaria media*	Chickweed	Caryophyllaceae	1	-
**Taraxacum officinale* spp. agg. M	Garden Dandelion	Asteraceae	1	1
**Tribolium acutiflorum* M	Desmazeria	Poaceae	-	1
Tricoryne elatior	Yellow Rush-lily	Hemerocallidaceae	1	-
**Trifolium dubium*	Suckling Clover	Fabaceae	1	-
**Trifolium fragiferum* M	Strawberry Clover	Fabaceae	-	1
**Trifolium glomeratum*	Cluster Clover	Fabaceae	1	1
**Trifolium repens* M	White Clover	Fabaceae	1	2
**Trifolium subterraneum*	Subterranean Clover	Fabaceae	1	1
**Vicia tetrasperma*	Slender Vetch	Fabaceae	1	1
**Vulpia* spp.	Fescue	Poaceae	1	1

Unfortunately this will be much more difficult and expensive to implement then would have been the case otherwise. In the previous monitoring of the weed flora the species recorded (see previous reports) were tractable and easily controlled physically or chemically. This is no longer the case because several rhizomatous weed species have become abundant and they have rhizomes and rootstocks mixed up with those of *Dianella*. They cannot be physically removed (dug out) without destroying or damaging *Dianella* plants, nor can they easily be killed by herbicide application (foliar spray) without harming the *Dianella* plants with which they are mixed. These rhizamatous weed species are:

**Acetosella vulgaris* (Sheep Sorrel)

**Agrostis capillaris* (Brown-top Bent)

**Agrostis stolonifera (*Creeping Bent)

**Cynodon dactylon* var. *dactylon* (Couch)

**Trifolium fragiferum* (Strawberry Clover)

**Trifolium repens* (White Clover)

A corollary problem is that long-term, soil-stored seed-banks have developed in some species (*Acetosella* and *Trifolium*) that will endure for decades; the problem will be ongoing. Additionally the *Trifolium* (clovers) are nitrogen-fixing and the soil will have elevated fertility, predisposing the site to weed invasion of the same or other weed species.

A meeting needs to be called on-site to evaluate the weed invasion issue and management options. Options are relatively limited but the first approach is very careful application of herbicide *after* the removal (cutting off) of all *Dianella* leaves to prevent herbicide uptake by *Dianella*. Cutting off *Dianella* leaves will not harm the plants. Other weeds, e.g. tussock-forming grasses, can be physically removed or spot-sprayed. Mulching after weed control may be advisable to minimise the recruitment of weeds on bare ground after removal of the standing weed crop.

3.5 Indigenous species

A suite of indigenous plant species has colonised the site and many of these need to be removed because they will adversely compete with *Dianella* plants; this particularly applies to *Acacia* spp. wattles and *Kunzea ericoides* (Burgan) and robust herbs such as *Poa labillardierei* var. *labillardierei*. (Common tussock grass). (Plates 2 and 3) Table 1 lists the species advocated for removal.

Plate 1 *Dianella amoena* plant-out site showing very high cover of weeds (May 2012)

Plate 2 White Clover (Trifolium repens*) is a very serious weed on the plant-out site (May 2012)**

Plate 3 Recruiting eucalypts in and outside the plant-out site (May 2012)

Plate 4 The indigenous Black Wattle (*Acacia mearnsii* on the plant-out site (May 2012)

3.6 Weed species outside the plant-out site

Outside the *Dianella amoena* plot there are also weed-management issues that need addressing. This includes slashing along the full easement to keep the weedy exotic grassy vegetation low to minimise seed-set, as seeds may disperse to the *Dianella* plot. A herbicide regime should also be maintained between the fence and the gravel-surfaced track to likewise prevent or minimise weed-seed dispersal into the plot. One of the seriously invasive weed species observed outside the plot is St John's Wort (**Hypericum perforatum*). This must be eliminated.

At least seven tree and shrub species are recruiting around the *Dianella* plot - on the north side and eastern end (as well as within the plot) (Plate 4). These arise from seed dispersal from the farm plantation on the south side of the plot and from the garden of the nearby residence. The following species were recorded as seedlings or young recruits in January 2012 and all need to be removed:

Eucalyptus botryoides (Southern Mahogany)

Eucalyptus camaldulensis (Red Gum)

Eucalyptus leucoxylon s.l. (Yellow Gum)

E. melliodora (Yellow Box)

Melaleuca armillaris ssp. *armillaris* (Giant Honey-myrtle)

Melaleuca linariifolia var. *linariifolia* (Flax-leaf Paperbark)

Melaleuca styphelioides var. *styphelioides* (Prickly Paperbark)

3.7 Hunts Lane north and south populations, Melba Highway

Very serious weed invasions will destroy these *Dianella* populations within a few years without appropriate management. The weed species recorded on these sites – based on the quadrat data given in Appendix 5 – are listed with indication of which species should be controlled in Appendix 7.

3.8 Other management issues at the Sugarloaf Pipeline easement plant-out site

Rabbits

Little evidence of rabbits was seen and at this time no management of rabbits is apparently required, however they need to be monitored and actions taken if deemed necessary. At this stage we have no information about the vulnerability of *D. amoena* foliage or inflorescences to rabbit grazing.

Snails

The exotic garden snail (*Cornu aspersum)* was recorded on-site and damage to *Dianella* fruits was observed. In cultivation, snails and presumably exotic slugs, can be very damaging to *Dianella* plants. Snails and slugs are very easily controlled with standard baiting procedures.

Shade-cloth

The shade-cloth on the fence had come adrift at its eastern end and in the other places and the flapping shade cloth has caused damage to *Dianella* plants. This needs to be secured and monitored to identify and fix the problem when it arises, however it is evident that the shade-cloth has reached the end of its effective life and needs to be replaced.

4 Recommendations

The following recommendations are made; they also repeat those from the former report.

1. Monitoring of weeds on the site should occur four times a year to determine which species should be managed, as follows:

    - *Autumn* approximately four weeks after the autumn break: April/May (depending on seasonal conditions)
    - *Late winter – early spring*: August
    - *Late spring*: November
    - *Early summer*: January

    This monitoring schedule will detect cool-season weeds which typically germinate in autumn, as well as warm season summer-growing weeds. The implementation of control measures, that is which species should be controlled and how they should be treated, will be determined by the results of the monitoring.

Weed monitoring and management

2. Implement management of identified weed species (Table 1) – either control or elimination from the site. This is to be carried out by a licensed weed contractor or bushland regenerator (as per SPA-REP-GL-ENV-001-Rev D- Version01).
3. Ensure that weed populations on the pipeline easement outside the receptor site are regularly controlled by slashing (to prevent seeding in the major grass-weed Paspalum (**Paspalum dilatatum*) or herbicide as appropriate (as per SPA-REP-GL-ENV-001-Rev D-Version01). Eliminate the extremely serious St John's-wort (**Hypericum perforatum*).
4. Conduct regular monitoring of weed populations and respond to weed invasion as appropriate and in a timely fashion.
5. Convene an on-site meeting at the earliest convenience to resolve weed management techniques and strategies.

General

6. Ensure regular evaluation of and implementation of management on the receptor site. It will also be necessary to ensure that the infrastructure remains functional (i.e. shade cloth, gate, farm fencing).
7. Remove recruiting trees and shrubs ('native' plants) from the vicinity of the *Dianella* plot.
8. Remove the indigenous plant species which have recruited in the *Dianella* plot from soil-stored, wind-blown or otherwise imported seed - see Table 1 for the list of species. These will negatively impact *D. amoena* because of competition for light and water.

9. Advise weed-management contractors to:
    - avoid removal of soil from the site as clods attached to weed roots
    - avoid trampling of *Dianella* plants
    - not to remove labels of *D. amoena* plants during weeding operations (as occurred in 2011 with plants in Plot 4).

Dianella monitoring

10. Monitoring of the performance of the *Dianella* plants according to the established agreement and commitment between the Pipeline Alliance, Department of Sustainability and Environment and Department of Environment, Water, Heritage and the Arts, as per reference SPA-REP-GL-ENV-001-Rev D-Version01 was to include all 1172 plants on the receptor site. This was considered unwarranted as the 8.8% of plants monitored in four subplots evenly distributed over the receptor site, are clearly representative of the full population, as supported by our observations A once-yearly spring/summer monitoring of the *D. amoena* henceforth is recommended.
11. Replace *D. amoena* plants that have died on the receptor site, because of the competition of weeds, after effective weed management has been implemented. A reserve supply of *D. amoena* plants is being maintained at the Buxton nursery.
12. Control Garden Snails (*Cornu aspersum*) on the site with standard snail bait.

Other issues

13. Ensure adjoining landowner maintains a strong stock-grazing regime on the property to the immediate south of the fence of the *Dianella* plot.
14. Renew the shade cloth which has come adrift from the fence.
15. Some trees in the plantation on the south side of the *Dianella* plot are excessively shading the *Dianella* plants. Negotiate with the landowner and remove some of the lower branches. This will have a very minor impact on the trees.
16. Permanent labelling is urgently required to ensure labelled plants are not 'lost'. (This has been implemented by the Ecology Australia subcontractor in April-May 2012).
17. Rabbits, which are currently at very low numbers (and with little or no impact), need to be monitored to determine adverse impacts and appropriate action as needed.

5 Acknowledgments

The assistance of Leora McMahon and Suzy Jaeger (Ecology Australia) is gratefully acknowledged.

6 References

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Appendix 1 Co-ordinates and data collected for Matted Flax-lily (Dianella amoena) receptor site, Sugarloaf Pipeline easement, Yarra Glen, May 2010.

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
1	357272.358	5833294.616	5	6	36	2-10	-	-	-	-
2	357272.437	5833294.385	7	7	23	2-5	-	-	-	-
3	357272.094	5833295.009	5	6	31	3-5	-	-	-	-
4	357272.087	5833295.357	6	10	24	2-5	-	-	-	-
5	357271.859	5833295.505	6	4	26	1-5	-	-	-	-
6	357272.033	5833295.869	4	3	33	3-5	-	-	-	-
7	357271.698	5833295.953	5	6	37	3-6	-	-	-	-
8	357271.806	5833296.369	7	10	29	3-6	-	-	-	-
9	357271.392	5833296.261	7	8	19	3-5	-	-	-	-
10	357270.905	5833295.989	5	6	37	2-6	-	-	-	-
11	357271.267	5833295.764	4	6	30	3-5	-	-	-	-
12	357271.43	5833295.223	6	5	26	2-7	-	-	-	-
13	357271.57	5833294.881	5	9	35	2-5	-	-	-	-
14	357271.86	5833294.502	7	8	29	2-8	-	-	-	-
15	357271.616	5833293.911	3	3	19	1-4	-	-	-	-
16	357271.574	5833294.322	6	4	29	3-8	-	-	-	-
17	357271.384	5833294.375	2	3	25	1-5	-	-	-	-
18	357271.06	5833294.729	4	4	38	-6	50	-	-	1
19	357270.976	5833295.339	7	6	23	3-5	-	-	-	-
20	357270.688	5833295.509	3	5	29	3-5	-	-	-	-
21	357270.296	5833295.738	3	2	23	5-6	-	-	-	-
22	357270.587	5833295.17	3	4	9	3-6	-	-	-	-
23	357270.808	5833294.906	5	3	22	3-5	-	-	-	-
24	357270.808	5833294.667	3	3	16	2-3	-	-	-	-
25	357270.964	5833294.26	2	4	5	2-3	-	-	-	-
26	357271.055	5833293.931	4	2	14	4-5	-	-	-	-
27	357270.754	5833293.715	3	3	9	2-4	-	-	-	-
28	357270.296	5833294.432	2	3	12	2-4	-	-	-	-
29	357269.903	5833294.803	3	2	10	2-3	-	-	-	-
30	357270.112	5833295.326	4	3	10	2-4	-	-	-	-
31	357269.81	5833295.316	5	4	26	3-6	-	-	-	-
32	357269.833	5833295.658	3	4	15	3-5	-	-	-	-
33	357269.472	5833295.471	4	4	20	3-5	-	-	-	-
34	357269.582	5833295.273	3	3	24	4-5	-	-	-	-
35	357269.495	5833294.911	2	2	9	2-3	-	-	-	-
36	357269.86	5833294.552	2	2	11	2-4	-	-	-	-
37	357270.082	5833294.145	1	1	3	3	-	-	-	-
38	357270.372	5833293.966	3	1	9	5	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
39	357270.515	5833293.438	2	2	24	3-4	-	-	-	-
40	357270.08	5833293.458	3	2	12	1-3	-	-	-	-
41	357269.892	5833293.818	6	3	12	1-4	-	-	-	-
42	357269.638	5833293.938	6	3	12	1-4	-	-	-	-
43	357269.429	5833294.337	1	1	12	2	-	-	-	-
44	357269.189	5833294.739	3	2	11	2-4	-	-	-	-
45	357269.081	5833295	3	3	10	2-5	-	-	-	-
46	357269.187	5833295.289	6	3	17	2-4	-	-	-	-
47	357268.821	5833295.174	1	1	15	4	-	-	-	-
48	357268.887	5833294.504	4	3	17	2-5	-	-	-	-
49	357269.099	5833294.225	3	3	14	3-5	-	-	-	-
50	357269.505	5833293.498	4	2	18	1-4	-	-	-	-
51	357269.863	5833293.213	1	1	18	2	-	-	-	-
52	357269.618	5833293.025	3	3	15	2-5	-	-	-	-
53	357269.112	5833293.464	2	2	24	5	-	-	-	-
54	357268.896	5833293.81	3	2	16	3-5	-	-	-	-
55	357268.648	5833294.247	4	2	19	1-6	-	-	-	-
56	357268.414	5833294.631	5	4	26	3-5	-	-	-	-
57	357268.668	5833294.854	5	3	19	2-7	-	-	-	-
58	357268.359	5833294.973	5	4	14	3-7	-	-	-	-
59	357267.995	5833294.865	2	1	22	7	-	-	-	-
60	357267.925	5833294.599	3	2	21	6-7	-	-	-	-
61	357268.009	5833294.067	5	3	26	3-7	-	-	-	-
62	357268.355	5833294.022	4	3	27	3-5	-	-	-	-
63	357268.523	5833293.774	5	5	27	3-6	-	-	-	-
64	357268.439	5833293.505	3	3	23	3-6	-	-	-	-
65	357268.884	5833293.161	5	2	26	5-6	-	-	-	-
66	357269.163	5833292.853	3	5	17	2-5	-	-	-	-
67	357268.678	5833292.652	7	4	25	2-5	-	-	-	-
68	357268.335	5833292.964	2	1	22	7	-	-	-	-
69	357268.089	5833293.382	2	1	28	8	-	-	-	-
70	357267.852	5833293.657	2	1	14	5	-	-	-	-
71	357267.62	5833294.015	5	3	19	2-3	-	-	-	-
72	357267.456	5833294.429	5	4	22	4-5	-	-	-	-
73	357267.509	5833294.609	2	2	24	2-8	-	-	-	-
74	357267.098	5833294.397	1	1	18	6	-	-	-	-
75	357267.311	5833293.879	4	4	22	3-5	-	-	-	-
76	357267.525	5833293.607	3	3	14	1-4	-	-	-	-
77	357267.613	5833293.288	3	4	7	24	-	-	-	-
78	357268.03	5833292.964	5	4	22	16	-	-	-	-
79	357268.317	5833292.561	5	4	22	1-6	-	-	-	-
80	357267.865	5833292.597	6	4	21	2-4	-	-	-	-
81	357267.68	5833292.203	3	2	18	3-4	-	-	-	-
82	357267.447	5833292.88	4	6	15	3-5	-	-	-	-
83	357267.234	5833293.219	3	5	11	1-4	-	-	-	-
84	357266.962	5833293.553	5	1	11	5	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
85	357266.791	5833294.035	2	5	17	1-3	-	-	-	-
86	357266.518	5833294.242	4	5	14	3-9	-	-	-	-
87	357266.314	5833293.772	5	3	18	2-6	-	-	-	-
88	357266.579	5833293.318	4	4	18	1-8	-	-	-	-
89	357266.844	5833293.137	2	2	14	2-4	-	-	-	-
90	357266.707	5833292.831	5	4	20	26	-	-	-	-
91	357267.095	5833292.811	3	3	15	2-5	-	-	-	-
92	357267.101	5833292.295	3	1	14	3-4	-	-	-	-
93	357267.114	5833292	1	1	9	3	-	-	-	-
94	357266.849	5833291.789	1	1	14	6	-	-	-	-
95	357266.625	5833292.436	2	1	22	7	-	-	-	-
96	357266.399	5833292.738	1	1	13	3	-	-	-	-
97	357266.199	5833293.348	7	6	20	1-5	-	-	-	-
98	357266.026	5833293.656	2	1	16	8	-	-	-	-
99	357266.02	5833294.042	6	5	17	3-4	-	-	-	-
100	357265.651	5833293.838	3	2	21	5	-	-	-	-
101	357265.807	5833293.433	3	2	20	3-6	-	-	-	-
102	357266.023	5833292.923	5	4	23	2-8	-	-	-	-
103	357266.212	5833292.428	3	3	11	2-7	-	-	-	-
104	357266.497	5833292.056	2	2	20	1-5	-	-	-	-
105	357266.462	5833291.665	4	3	24	1-5	-	-	-	-
106	357266.175	5833292.067	2	2	11	3-4	-	-	-	-
107	357265.722	5833292.449	4	3	25	3-6	-	-	-	-
108	357265.579	5833293.05	2	2	10	1-2	-	-	-	-
109	357265.376	5833293.343	5	5	13	3-8	-	-	-	-
110	357264.989	5833293.491	4	3	18	3-6	-	-	-	-
111	357265.05	5833293.029	3	3	22	1-5	-	-	-	-
112	357265.44	5833292.187	6	3	17	3-7	-	-	-	-
113	357266.028	5833291.419	5	3	15	2-6	-	-	-	-
114	357265.4	5833291.419	2	3	16	3-6	-	-	-	-
115	357264.914	5833291.934	5	3	13	3-5	-	-	-	-
116	357264.915	5833292.433	5	3	21	1-6	-	-	-	-
117	357264.62	5833292.74	3	2	18	1	-	-	-	-
118	357264.44	5833293.268	5	2	31	5-7	-	-	-	-
119	357263.707	5833292.977	2	3	14	1-3	-	-	-	-
120	357264.023	5833292.642	3	2	19	4-3	-	-	-	-
121	357264.133	5833292.009	2	3	23	1-3	-	-	-	-
122	357264.557	5833291.772	3	4	14	2-4	-	-	-	-
123	357264.375	5833291.469	5	3	25	3-9	-	-	-	-
124	357264.775	5833291.161	3	3	26	2-8	-	-	-	-
125	357264.173	5833290.937	5	6	24	2-5	-	-	-	-
126	357263.857	5833290.907	5	5	23	4-5	-	-	-	-
127	357263.763	5833291.786	5	3	33	5-7	-	-	-	-
128	357263.759	5833292.297	3	2	26	1-4	-	-	-	-
129	357263.429	5833292.671	8	4	17	1-6	-	-	-	-
130	357262.965	5833292.498	4	4	29	3-6	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
131	357263.324	5833292.048	3	3	17	3-6	-	-	-	-
132	357263.236	5833291.553	4	5	19	2-5	-	-	-	-
133	357263.381	5833291.154	5	4	31	2-5	-	-	-	-
134	357263.148	5833290.498	3	4	19	2-3	-	-	-	-
135	357262.709	5833291.358	5	3	20	3-13	-	-	-	-
136	357262.933	5833291.663	3	2	23	5-6	-	-	-	-
137	357262.937	5833292.054	3	3	24	1-7	-	-	-	-
138	357262.527	5833292.052	3	3	19	4-8	-	-	-	-
139	357262.378	5833292.461	3	4	20	4-6	-	-	-	-
140	357261.838	5833292.175	2	3	19	1-4	-	-	-	-
141	357262.324	5833291.803	3	2	26	5-1	-	-	-	-
142	357261.926	5833291.302	2	2	13	4	-	-	-	-
143	357262.188	5833290.985	4	3	26	3-5	-	-	-	-
144	357262.52	5833290.661	5	4	21	1-4	-	-	-	-
145	357262.444	5833290.042	6	6	21	3-5	-	-	-	-
146	357261.91	5833289.865	6	5	25	1-8	-	-	-	-
147	357261.862	5833290.637	5	3	32	4-5	-	-	-	-
148	357261.551	5833290.953	5	5	13	2-4	-	-	-	-
149	357261.309	5833291.466	2	2	14	3-4	-	-	-	-
150	357261.696	5833291.766	2	2	5	2-4	-	-	-	-
151	357261.091	5833291.884	4	3	20	2-3	-	-	-	-
152	357260.715	5833291.622	3	2	17	1-4	-	-	-	-
153	357260.798	5833291.343	4	3	23	3-6	-	-	-	-
154	357260.992	5833290.859	3	2	12	1	-	-	-	-
155	357261.183	5833290.405	5	5	20	3-7	-	-	-	-
156	357261.481	5833289.947	3	3	21	1-6	-	-	-	-
157	357261.316	5833289.589	4	3	25	2-5	-	-	-	-
158	357260.955	5833289.964	3	3	21	2-4	-	-	-	-
159	357260.557	5833290.251	2	3	10	2-4	-	-	-	-
160	357260.593	5833290.88	3	4	9	3-4	-	-	-	-
161	357260.374	5833291.32	4	3	21	2-4	-	-	-	-
162	357260.157	5833290.924	3	2	8	1-3	-	-	-	-
163	357260.151	5833290.501	3	3	10	2-4	-	-	-	-
164	357260.118	5833290.057	4	5	16	1-3	-	-	-	-
165	357260.355	5833289.734	4	2	16	2-4	-	-	-	-
166	357260.518	5833289.545	1	3	13	1	-	-	-	-
167	357260.882	5833289.323	4	4	6	1-4	-	-	-	-
168	357259.971	5833288.996	3	3	6	3	-	-	-	-
169	357260.039	5833289.399	2	2	6	2	-	-	-	-
170	357259.662	5833289.7	4	5	9	2-4	-	-	-	-
171	357259.382	5833290.155	3	5	10	1-3	-	-	-	-
172	357259.704	5833290.308	3	3	12	1-5	-	-	-	-
173	357259.587	5833290.662	2	2	14	3	-	-	-	-
174	357259.584	5833291.231	3	4	6	2-3	-	-	-	-
175	357258.964	5833290.95	2	3	17	2-5	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
176	357258.653	5833290.789	3	3	16	2-5	-	-	-	-
177	357258.704	5833290.407	4	2	15	3	-	-	-	-
178	357259.196	5833290.562	3	4	16	1-4	-	-	-	-
179	357258.983	5833290.285	5	4	20	1-6	-	-	-	-
180	357259.149	5833289.59	5	5	29	4-5	45	-	-	3
181	357259.552	5833289.284	3	2	7	2-5	-	-	-	-
182	357259.479	5833288.855	3	3	14	2-3	-	-	-	-
183	357259.177	5833288.762	3	4	10	2-5	-	-	-	-
184	357259.069	5833289.123	5	6	22	2-4	-	-	-	-
185	357258.612	5833289.862	3	1	19	11	-	-	-	-
186	357258.298	5833290.405	5	5	24	3-5	-	-	-	-
187	357257.983	5833290.609	5	3	22	3-7	-	-	-	-
188	357258.174	5833289.98	3	3	14	4-5	-	-	-	-
189	357258.106	5833289.587	5	4	33	3-4	-	-	-	-
190	357258.471	5833289.154	4	5	26	3-5	-	-	-	-
191	357258.548	5833288.765	3	4	24	2-5	-	-	-	-
192	357258.174	5833288.324	5	4	15	1-6	-	-	-	-
193	357258.048	5833288.787	4	4	21	2-10	-	-	-	-
194	357257.905	5833289.215	4	4	28	1-3	-	-	-	-
195	357257.633	5833289.663	4	4	28	3-7	-	-	-	-
196	357257.59	5833290.036	4	4	25	2-4	28	-	-	3
197	357257.402	5833290.335	5	4	29	3-8	-	-	-	-
198	357256.867	5833290.03	1	1	13	2	-	-	-	-
199	357257.177	5833289.698	3	2	12	2-4	-	-	-	-
200	357257.376	5833289.21	5	3	28	1-4	-	-	-	-
201	357257.403	5833288.707	4	3	14	1-8	-	-	-	-
202	357257.575	5833288.239	3	3	18	2-6	-	-	-	-
203	357257.111	5833288.296	1	1	5	4	-	-	-	-
204	357256.865	5833288.692	3	3	10	2-4	-	-	-	-
205	357256.476	5833288.893	3	3	12	3-4	-	-	-	-
206	357256.562	5833289.427	2	1	8	8	-	-	-	-
207	357256.514	5833289.849	2	2	18	2-4	-	-	-	-
208	357255.815	5833289.557	2	2	11	3-6	-	-	-	-
209	357256.026	5833289.154	3	3	28	1-4	-	-	-	-
210	357256.138	5833288.76	2	2	13	4	-	-	-	-
211	357256.389	5833288.352	3	2	17	4	-	-	-	-
212	357256.414	5833288.004	2	2	10	1-4	-	-	-	-
213	357256.858	5833287.904	2	2	13	1-3	-	-	-	-
214	357256.493	5833287.6	3	3	11	1-2	-	-	-	-
215	357255.976	5833287.505	4	5	7	1-5	-	-	-	-
216	357255.875	5833287.953	3	2	8	1-5	-	-	-	-
217	357255.619	5833288.638	5	4	10	2-5	-	-	-	-
218	357255.421	5833289.079	1	2	18	2-3	-	-	-	-
219	357254.812	5833289.075	5	3	27	3-6	-	-	-	-
220	357254.865	5833288.65	4	3	32	6-9	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
221	357255.163	5833288.275	6	5	24	4-8	-	-	-	-
222	357255.216	5833287.861	5	5	24	1-6	-	-	-	-
223	357255.38	5833287.441	8	4	25	1-8	-	-	-	-
224	357255.184	5833286.978	5	4	18	1-4	-	-	-	-
225	357254.851	5833287.333	4	6	25	1-7	-	-	-	-
226	357254.502	5833287.995	6	3	30	5-9	-	-	-	-
227	357254.126	5833288.345	4	3	25	5-10	-	-	-	-
228	357254.195	5833288.814	3	3	28	2-8	-	-	-	-
229	357253.434	5833288.461	5	5	34	2-7	-	-	-	-
230	357253.829	5833287.79	7	4	31	4-7	-	-	-	-
231	357254.262	5833287.079	5	6	28	3-8	-	-	-	-
232	357254.52	5833286.853	5	3	26	6-9	-	-	-	-
233	357253.98	5833286.706	10	6	26	1-4	-	-	-	-
234	357253.781	5833287.265	8	7	29	1-5	-	-	-	-
235	357253.352	5833287.6	7	5	28	2-8	-	-	-	-
236	357253.237	5833288.015	6	2	24	7	-	-	-	-
237	357252.966	5833288.35	4	3	28	3-4	-	-	-	-
238	357252.652	5833288.029	4	3	21	3-4	-	-	-	-
239	357252.617	5833287.455	6	3	25	3-9	-	-	-	-
240	357252.91	5833287.056	4	3	25	3-5	-	-	-	-
241	357253.341	5833286.832	6	5	26	1-7	-	-	-	-
242	357253.581	5833286.328	5	4	21	3-4	-	-	-	-
243	357253.037	5833286.456	2	3	15	2-6	-	-	-	-
244	357252.711	5833286.025	3	5	25	1-7	-	-	-	-
245	357252.133	5833286.598	4	4	24	3-5	-	-	-	-
246	357252.112	5833287.252	3	3	23	3-6	-	-	-	-
247	357251.901	5833287.549	4	3	27	1-7	-	-	-	-
248	357252.111	5833287.907	3	3	25	3-7	-	-	-	-
249	357251.465	5833287.676	4	5	22	4-5	-	-	-	-
250	357251.152	5833287.512	4	4	22	2-7	-	-	-	-
251	357251.437	5833287.115	3	4	21	5-6	-	-	-	-
252	357251.588	5833286.719	2	3	26	3-6	-	-	-	-
253	357252.126	5833286.106	5	5	29	2-5	-	-	-	-
254	357251.905	5833285.684	4	5	29	2-5	-	-	-	-
255	357251.546	5833285.729	4	5	19	2-7	-	-	-	-
256	357251.209	5833286.021	3	3	25	3-5	-	-	-	-
257	357251.262	5833286.593	3	5	16	2-6	-	-	-	-
258	357251.085	5833287.091	2	2	17	3-4	-	-	-	-
259	357250.727	5833287.488	5	4	21	2-5	-	-	-	-
260	357250.588	5833286.903	3	2	15	2-4	-	-	-	-
261	357250.464	5833286.392	3	2	20	2-5	-	-	-	-
262	357250.577	5833285.836	8	3	13	2-3	-	-	-	-
263	357250.917	5833285.597	2	2	16	1-3	-	-	-	-
264	357251.245	5833285.236	2	2	20	3-3	-	-	-	-
265	357250.709	5833285.017	3	2	13	2-4	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
266	357250.417	5833285.37	3	3	23	2-5	-	-	-	-
267	357250.145	5833285.647	2	3	16	2-4	-	-	-	-
268	357249.985	5833286.121	3	3	24	3-5	-	-	-	-
269	357250.112	5833286.814	2	2	16	2-7	-	-	-	-
270	357249.815	5833286.95	7	4	11	2-6	-	-	-	-
271	357249.361	5833286.815	2	2	25	4-7	-	-	-	-
272	357249.614	5833286.361	2	2	27	3-6	-	-	-	-
273	357249.613	5833285.833	6	3	12	1-3	-	-	-	-
274	357249.614	5833285.198	2	3	21	1-4	-	-	-	-
275	357249.996	5833285.131	3	2	22	4-5	-	-	-	-
276	357250.124	5833284.774	4	2	18	1-4	-	-	-	-
277	357249.501	5833284.627	4	2	15	4-5	-	-	-	-
278	357249.177	5833285.246	5	4	13	1-3	-	-	-	-
279	357249.136	5833286.162	2	2	15	5-6	-	-	-	-
280	357248.951	5833286.519	2	2	21	3-5	-	-	-	-
281	357248.414	5833286.434	6	4	17	3-5	-	-	-	-
282	357248.498	5833286.028	3	4	16	2-6	-	-	-	-
283	357248.624	5833285.646	6	4	20	2-6	-	-	-	-
284	357248.763	5833284.913	4	3	10	1-3	-	-	-	-
285	357249.01	5833284.691	2	2	15	3-4	-	-	-	-
286	357248.799	5833284.275	1	1	13	2	-	-	-	-
287	357248.35	5833284.662	7	2	14	4-5	-	-	-	-
288	357248.338	5833285.076	3	4	13	1-6	-	-	-	-
289	357248.166	5833285.757	5	3	16	3-4	-	-	-	-
290	357247.954	5833286.247	3	2	13	1-3	-	-	-	-
291	357247.403	5833286.126	2	1	13	6	-	-	-	-
292	357247.68	5833285.749	5	6	13	1-4	-	-	-	-
293	357247.807	5833285.313	3	2	15	4-5	-	-	-	-
294	357247.868	5833284.656	3	3	16	2-4	-	-	-	-
295	357248.203	5833284.122	1	2	17	4-4	-	-	-	-
296	357247.947	5833283.781	1	1	5	3	-	-	-	-
297	357247.49	5833284.2	1	1	8	2	-	-	-	-
298	357247.365	5833284.892	1	1	7	1	-	-	-	-
299	357247.271	5833285.381	3	4	14	2-5	-	-	-	-
300	357246.946	5833285.812	3	4	15	2-6	-	-	-	-
301	357246.779	5833285.329	2	2	9	1-3	-	-	-	-
302	357246.99	5833284.253	2	2	17	2-4	-	-	-	-
303	357247.335	5833283.763	1	1	11	3	-	-	-	-
304	357246.93	5833283.472	5	3	13	3-4	-	-	-	-
305	357246.692	5833283.799	2	2	14	1-2	-	-	-	-
306	357246.241	5833283.981	3	4	12	1-2	-	-	-	-
307	357246.216	5833284.531	1	1	4	1	-	-	-	-
308	357245.99	5833284.941	4	2	14	4-5	-	-	-	-
309	357246.144	5833285.433	3	2	14	2-4	-	-	-	-
310	357245.422	5833285.07	4	2	12	3-3	-	-	-	-
311	357245.671	5833284.635	2	1	13	3	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
312	357245.63	5833284.193	4	2	14	1-4	-	-	-	-
313	357246.041	5833283.486	5	4	16	2-3	-	-	-	-
314	357246.321	5833283.408	4	2	11	1-4	-	-	-	-
315	357245.911	5833283.023	2	3	19	3-5	-	-	-	-
316	357245.596	5833283.729	8	2	15	3-6	-	-	-	-
317	357245.06	5833284.622	4	3	14	3-7	-	-	-	-
318	357244.59	5833284.784	3	3	21	2-5	-	-	-	-
319	357244.839	5833284.223	7	4	18	1-4	-	-	-	-
320	357245.026	5833283.993	3	3	25	3-5	-	-	-	-
321	357245.01	5833283.578	2	3	14	2-5	-	-	-	-
322	357245.43	5833283.185	7	4	25	1-9	-	-	-	-
323	357245.13	5833282.75	7	5	19	2-6	-	-	-	-
324	357244.543	5833282.477	4	3	19	3-6	-	-	-	-
325	357244.578	5833283.078	5	4	17	1-4	-	-	-	-
326	357244.367	5833283.795	3	2	18	1-4	-	-	-	-
327	357244.022	5833284.009	5	2	22	3	-	-	-	-
328	357244.346	5833284.415	4	5	14	1-3	-	-	-	-
329	357243.903	5833284.381	5	5	26	3-6	-	-	-	-
330	357243.127	5833284.27	1	2	17	4-5	-	-	-	-
331	357243.667	5833284.032	3	3	23	4-6	-	-	-	-
332	357243.425	5833283.527	2	3	10	1-3	-	-	-	-
333	357243.992	5833283.369	3	4	13	3-5	-	-	-	-
334	357243.882	5833282.923	1	2	13	1-3	-	-	-	-
335	357244.124	5833282.622	4	4	16	1-3	-	-	-	-
336	357243.941	5833282.19	5	6	20	3-4	-	-	-	-
337	357243.565	5833282.506	5	2	18	3-6	-	-	-	-
338	357243.522	5833282.984	8	7	16	1-4	-	-	-	-
339	357242.841	5833283.612	3	2	9	1-4	-	-	-	-
340	357242.232	5833283.815	3	3	14	2-4	-	-	-	-
341	357242.11	5833283.505	3	2	21	4-5	-	-	-	-
342	357242.376	5833283.025	3	2	14	4-6	-	-	-	-
343	357242.678	5833283.31	3	2	22	5	-	-	-	-
344	357242.99	5833282.736	2	2	7	1-4	-	-	-	-
345	357242.571	5833282.503	3	3	18	3-3	-	-	-	-
346	357243.055	5833282.14	3	2	16	6-7	-	-	-	-
347	357243.207	5833281.861	2	2	12	2-4	-	-	-	-
348	357242.65	5833281.788	3	3	19	1-4	-	-	-	-
349	357242.279	5833281.934	4	3	21	1-5	-	-	-	-
350	357241.831	5833282.649	5	5	16	2-5	-	-	-	-
351	357241.694	5833283.122	3	2	15	2-5	-	-	-	-
352	357241.633	5833283.55	3	3	22	2-6	-	-	-	-
353	357241.123	5833283.043	5	3	19	2-5	-	-	-	-
354	357241.182	5833282.173	6	4	10	4	-	-	-	-
355	357241.618	5833282.01	2	2	16	3-4	-	-	-	-
356	357242.067	5833281.402	3	5	13	2-5	-	-	-	-
357	357241.406	5833281.156	4	5	17	3-4	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
358	357241.002	5833281.522	3	4	11	3-5	-	-	-	-
359	357240.506	5833281.924	4	2	14	2-1	-	-	-	-
360	357240.662	5833282.568	3	5	11	2-5	-	-	-	-
361	357240.519	5833283.137	1	3	16	4-5	-	-	-	-
362	357239.943	5833282.846	2	2	20	5-8	-	-	-	-
363	357239.479	5833282.546	5	4	20	2-3	-	-	-	-
364	357239.995	5833281.945	4	2	12	5	-	-	-	-
365	357240.377	5833281.404	3	3	19	2-6	-	-	-	-
366	357240.646	5833280.753	4	2	15	2-3	-	-	-	-
367	357240.027	5833280.774	3	3	14	2-4	-	-	-	-
368	357239.724	5833281.418	2	3	18	2-4	-	-	-	-
369	357239.599	5833281.704	3	3	18	2-3	-	-	-	-
370	357238.999	5833282.181	5	5	23	3-5	-	-	-	-
371	357238.583	5833282.265	4	3	5	1	-	-	-	-
372	357238.904	5833281.515	2	2	13	3	-	-	-	-
373	357239.158	5833280.86	2	3	15	1-4	-	-	-	-
374	357239.472	5833280.343	6	3	26	4-7	-	-	-	-
375	357239.003	5833280.088	4	2	14	2-3	-	-	-	-
376	357238.58	5833280.365	5	3	33	3-6	-	-	-	-
377	357238.785	5833280.937	3	3	18	3-5	-	-	-	-
378	357238.554	5833281.315	5	3	20	3-4	-	-	-	-
379	357238.417	5833281.799	2	3	21	2-9	-	-	-	-
380	357238.006	5833281.956	4	5	13	2-4	-	-	-	-
381	357238.047	5833281.434	3	4	22	2-5	-	-	-	-
382	357238.229	5833280.655	6	7	17	2-5	-	-	-	-
383	357238.385	5833279.883	3	3	23	3-4	-	-	-	-
384	357237.689	5833279.73	1	2	11	2-4	-	-	-	-
385	357237.562	5833280.291	5	9	24	1-7	-	-	-	-
386	357237.785	5833280.926	6	5	27	4-8	-	-	-	-
387	357237.396	5833281.302	4	4	20	3-4	-	-	-	-
388	357237.344	5833281.774	4	3	19	1-4	-	-	-	-
389	357236.664	5833281.462	2	3	21	4-5	-	-	-	-
390	357236.832	5833280.963	4	3	25	2-5	-	-	-	-
391	357237.168	5833280.606	7	3	11	1-3	-	-	-	-
392	357236.667	5833280.329	2	2	17	5-6	-	-	-	-
393	357236.66	5833279.793	2	1	18	7	-	-	-	-
394	357237.245	5833279.709	1	1	9	5	-	-	-	-
395	357237.236	5833279.262	6	4	26	2-5	-	-	-	-
396	357236.462	5833279.027	4	3	22	4-7	-	-	-	-
397	357236.146	5833279.383	4	3	15	4-5	-	-	-	-
398	357236.123	5833280.297	4	3	14	3-8	-	-	-	-
399	357236.258	5833281.03	4	2	16	3-4	-	-	-	-
400	357235.855	5833280.909	3	2	20	3-4	-	-	-	-
401	357235.306	5833280.67	2	3	17	4-4	-	-	-	-
402	357235.493	5833280.197	4	1	21	6	-	-	-	-
403	357235.459	5833279.56	3	2	19	3-4	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
404	357235.431	5833279.033	2	4	12	2-6	-	-	-	-
405	357235.775	5833278.661	1	2	18	4-4	-	-	-	-
406	357235.042	5833278.462	1	2	8	5-6	-	-	-	-
407	357234.795	5833278.652	2	2	14	3-4	-	-	-	-
408	357235.137	5833278.351	2	3	10	2-6	-	-	-	-
409	357234.624	5833279.653	2	3	13	3-4	-	-	-	-
410	357234.656	5833280.318	1	1	18	3	-	-	-	-
411	357234.091	5833280.365	3	2	24	4-8	-	-	-	-
412	357233.706	5833279.753	2	2	19	3-6	-	-	-	-
413	357234.276	5833279.645	1	1	4	14	-	-	-	-
414	357233.718	5833279.306	2	2	17	1-3	-	-	-	-
415	357234.128	5833278.929	2	1	18	7	-	-	-	-
416	357234.314	5833278.244	2	2	15	1-5	-	-	-	-
417	357233.797	5833278.13	1	1	9	5	-	-	-	-
418	357233.661	5833278.617	5	2	12	1-2	-	-	-	-
419	357233.201	5833278.916	3	3	16	2-5	-	-	-	-
420	357233.195	5833279.465	4	2	12	3-5	-	-	-	-
421	357232.814	5833279.696	5	4	19	3-5	-	-	-	-
422	357232.746	5833279.284	2	2	16	3-4	-	-	-	-
423	357232.71	5833278.746	5	4	22	24	-	-	-	-
424	357232.894	5833278.533	2	2	17	3-5	-	-	-	-
425	357233.224	5833278.334	4	2	19	3-5	-	-	-	-
426	357233.593	5833277.807	4	2	11	3-4	-	-	-	-
427	357233.154	5833277.52	4	3	17	1-3	-	-	-	-
428	357232.703	5833277.418	1	2	14	4-5	-	-	-	-
429	357232.721	5833277.873	4	3	16	2-5	-	-	-	-
430	357232.18	5833277.655	4	2	21	4-5	-	-	-	-
431	357231.697	5833279.082	3	2	19	2-5	-	-	-	-
432	357231.7	5833278.497	5	3	9	1-2	-	-	-	-
433	357232.181	5833277.496	2	2	24	3-6	-	-	-	-
434	357232.012	5833277.014	1	1	17	8	-	-	-	-
435	357231.639	5833277.666	5	2	14	2-5	-	-	-	-
436	357231.489	5833277.939	4	4	19	1-6	-	-	-	-
437	357231.163	5833278.699	4	2	14	4-5	57	-	-	4
438	357231.471	5833279.176	2	2	20	2-6	-	-	-	-
439	357230.499	5833278.466	2	2	12	2-3	-	-	-	-
440	357230.998	5833278.203	4	2	12	1-4	-	-	-	-
441	357230.789	5833277.724	3	5	16	1-4	-	-	-	-
442	357231.101	5833277.415	2	3	20	1-5	-	-	-	-
443	357231.413	5833277.091	4	3	26	1-4	-	-	-	-
444	357231.042	5833276.703	4	2	12	1-4	-	-	-	-
445	357230.516	5833276.441	3	3	15	3-4	36	-	-	4
446	357230.751	5833276.964	4	2	19	2-5	-	-	-	-
447	357230.356	5833277.266	5	2	21	4-5	-	-	-	-
448	357229.989	5833277.642	2	2	21	1-7	-	-	-	-
449	357230.092	5833278.056	2	3	22	2-6	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
450	357229.785	5833278.503	2	2	19	1-6	-	-	-	-
451	357229.33	5833277.961	2	2	8	1	-	-	-	-
452	357229.305	5833277.367	3	3	20	1-2	-	-	-	-
453	357229.57	5833276.819	2	3	7	1-2	-	-	-	-
454	357229.949	5833276.504	2	2	14	1	-	-	-	-
455	357229.607	5833276.014	2	2	15	1-3	-	-	-	-
456	357229.383	5833276.35	1	1	9	1	-	-	-	-
457	357228.946	5833276.665	3	3	12	3-5	-	-	-	-
458	357228.923	5833277.01	3	3	11	1-2	-	-	-	-
459	357228.629	5833277.649	2	3	9	1-5	-	-	-	-
460	357228.82	5833278.161	2	2	6	1-2	-	-	-	-
461	357228.117	5833277.697	2	2	16	3-5	-	-	-	-
462	357228.383	5833277.049	3	2	18	1	-	-	-	-
463	357228.795	5833276.23	2	1	5	2	-	-	-	-
464	357229.062	5833275.77	1	1	23	3	-	-	-	-
465	357228.581	5833275.768	3	2	16	3-4	-	-	-	-
466	357228.211	5833275.64	4	3	19	4-6	-	-	-	-
467	357228.025	5833276.123	2	3	26	2-5	-	-	-	-
468	357228.344	5833276.35	2	2	20	2-4	-	-	-	-
469	357228.176	5833276.778	3	3	5	2	-	-	-	-
470	357227.93	5833277.23	6	2	12	2	-	-	-	-
471	357227.713	5833277.614	1	1	14	4	-	-	-	-
472	357227.165	5833277.456	2	4	22	1-4	-	-	-	-
473	357227.23	5833277.045	4	4	16	1-4	-	-	-	-
474	357227.565	5833276.424	4	4	20	3-7	-	-	-	-
475	357227.67	5833275.693	1	1	4	4	-	-	-	-
476	357227.426	5833275.161	1	2	18	2-3	-	-	-	-
477	357227.299	5833275.915	4	3	18	4-6	-	-	-	-
478	357226.929	5833276.442	2	3	19	1-5	-	-	-	-
479	357226.579	5833277.126	4	2	20	3-5	-	-	-	-
480	357226.424	5833276.694	7	4	25	2-5	-	-	-	-
481	357226.658	5833275.938	5	4	22	4-7	-	-	-	-
482	357226.862	5833275.621	1	1	10	3	-	-	-	-
483	357226.93	5833275.253	8	3	18	3-4	51	-	-	3
484	357226.594	5833274.895	2	3	20	3-6	-	-	-	-
485	357226.327	5833275.347	1	1	10	5	-	-	-	-
486	357226.201	5833276.134	1	1	9	2	-	-	-	-
487	357225.986	5833276.869	4	7	17	3-6	36	-	-	3
488	357225.662	5833276.624	4	4	25	2-6	-	-	-	-
489	357225.644	5833276.163	1	2	14	2-4	-	-	-	-
490	357225.917	5833275.711	2	2	11	1-5	-	-	-	-
491	357226.135	5833274.943	2	2	17	3-4	25	-	-	4
492	357225.945	5833274.523	2	2	16	3-6	-	-	-	-
493	357225.474	5833275.05	5	3	10	3-5	-	-	-	-
494	357225.689	5833275.472	2	3	12	3-4	-	-	-	-
495	357225.283	5833275.922	3	5	21	1-3	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
496	357225.103	5833276.554	1	2	12	1-3	-	-	-	-
497	357224.656	5833276.002	2	1	17	6	-	-	-	-
498	357224.899	5833275.507	2	3	18	4-6	-	-	-	-
499	357225.383	5833274.447	3	3	13	2-5	-	-	-	-
500	357224.815	5833274.191	2	2	13	2-5	-	-	-	-
501	357224.907	5833274.887	4	4	15	3-5	-	-	-	-
502	357224.432	5833274.81	2	3	14	2-6	-	-	-	-
503	357224.121	5833275.251	3	3	21	3-6	-	-	-	-
504	357224.548	5833275.655	5	2	17	3-4	-	-	-	-
505	357224.327	5833276.201	3	3	18	3-5	-	-	-	-
506	357223.761	5833275.803	1	1	12	5	-	-	-	-
507	357223.49	5833275.528	3	3	14	4-6	-	-	-	-
508	357223.66	5833274.918	4	4	15	3-5	-	-	-	-
509	357223.935	5833274.637	3	3	13	4-6	-	-	-	-
510	357224.185	5833273.993	2	2	14	3-5	-	-	-	-
511	357223.55	5833273.674	2	3	20	1-3	-	-	-	-
512	357223.627	5833274.205	2	2	13	5-6	-	-	-	-
513	357223.225	5833274.251	5	3	12	2-6	-	-	-	-
514	357222.951	5833274.699	2	3	13	1-5	-	-	-	-
515	357223.252	5833274.99	3	3	15	1-4	-	-	-	-
516	357222.812	5833275.127	2	1	10	7	-	-	-	-
517	357222.875	5833275.556	1	2	13	1-7	-	-	-	-
518	357222.417	5833275.259	1	1	12	5	-	-	-	-
519	357222.493	5833274.708	1	1	11	4	-	-	-	-
520	357222.603	5833274.221	4	3	11	3-5	-	-	-	-
521	357222.539	5833273.884	2	2	12	1-6	-	-	-	-
522	357223.084	5833273.776	5	2	16	1-5	-	-	-	-
523	357222.901	5833273.3	4	4	13	3-6	-	-	-	-
524	357222.495	5833273.33	3	4	9	2-3	-	-	-	-
525	357222.121	5833273.033	3	4	20	1-5	-	-	-	-
526	357222.226	5833273.426	2	3	11	2-5	-	-	-	-
527	357222.14	5833274.001	4	5	22	1-3	-	-	-	-
528	357222.083	5833274.477	3	3	12	1-4	-	-	-	-
529	357222.108	5833274.924	2	3	14	2-8	-	-	-	-
530	357221.757	5833275.024	2	2	15	4-5	-	-	-	-
531	357221.38	5833274.984	3	3	15	1-4	-	-	-	-
532	357221.707	5833274.563	3	2	27	5-6	-	-	-	-
533	357221.019	5833274.6	2	3	23	2-7	-	-	-	-
534	357221.275	5833274.291	4	2	25	5-8	-	-	-	-
535	357221.648	5833273.997	4	4	15	3-5	-	-	-	-
536	357221.208	5833273.837	4	5	26	3-7	-	-	-	-
537	357221.515	5833273.608	5	3	15	3-5	-	-	-	-
538	357221.788	5833273.289	2	3	13	2-5	-	-	-	-
539	357221.831	5833272.967	3	3	32	2-5	-	-	-	-
540	357221.468	5833272.676	4	5	26	2-4	-	-	-	-
541	357221.233	5833273.388	5	6	29	2-5	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
542	357220.74	5833273.624	2	1	23	8	-	-	-	-
543	357220.758	5833274.01	3	4	24	3-6	-	-	-	-
544	357220.627	5833274.733	3	4	20	3-4	-	-	-	-
545	357220.367	5833274.452	4	4	25	3-5	-	-	-	-
546	357219.881	5833274.243	3	2	20	4	-	-	-	-
547	357220.162	5833273.839	2	1	12	2	-	-	-	-
548	357220.328	5833273.513	2	1	15	7	-	-	-	-
549	357220.641	5833272.924	3	6	23	3-5	-	-	-	-
550	357220.893	5833272.459	4	5	26	3-5	-	-	-	-
551	357220.379	5833272.489	4	2	25	2-5	-	-	-	-
552	357220.049	5833272.863	1	2	17	1-3	-	-	-	-
553	357220.005	5833273.254	4	3	23	2-9	-	-	-	-
554	357219.784	5833273.687	3	2	12	4-5	-	-	-	-
555	357219.471	5833274.051	1	1	12	5	-	-	-	-
556	357219.06	5833273.847	2	2	30	2-5	-	-	-	-
557	357219.387	5833273.452	2	2	21	1-7	-	-	-	-
558	357219.107	5833273.399	6	4	15	1-4	-	-	-	-
559	357219.415	5833272.886	3	3	20	2-3	-	-	-	-
560	357219.896	5833272.115	4	3	21	2-5	-	-	-	-
561	357219.471	5833272.002	4	2	15	3-4	-	-	-	-
562	357219.162	5833272.335	1	2	20	2-5	-	-	-	-
563	357218.916	5833272.692	4	3	20	3-7	-	-	-	-
564	357218.712	5833273.043	1	1	12	3	-	-	-	-
565	357218.667	5833273.688	3	3	24	2-6	-	-	-	-
566	357218.228	5833273.516	2	2	25	5	-	-	-	-
567	357217.969	5833273.214	1	1	13	6	-	-	-	-
568	357218.408	5833273.096	3	2	15	3-6	-	-	-	-
569	357218.885	5833272.076	2	3	24	3-4	-	-	-	-
570	357219.086	5833271.778	4	3	12	3-5	-	-	-	-
571	357218.718	5833271.674	-	-	-	-	-	-	-	-
572	357218.579	5833271.938	3	3	11	3-4	-	-	-	-
Note no. 572: No Dianella, just *Tricoryne elatior*										
573	357218.306	5833272.34	7	4	13	2-7	-	-	-	-
574	357217.982	5833272.913	5	4	30	3-6	-	-	-	-
575	357217.551	5833273.221	3	3	17	3-5	-	-	-	-
576	357217.203	5833273.049	3	3	15	3-5	-	-	-	-
577	357217.303	5833272.489	2	1	18	7	-	-	-	-
578	357217.767	5833272.426	2	2	24	2-6	-	-	-	-
579	357217.442	5833272.06	3	3	16	2-5	-	-	-	-
580	357217.728	5833271.661	1	1	20	4	-	-	-	-
581	357218.266	5833271.402	1	1	5	2	-	-	-	-
582	357217.861	5833271.233	1	1	10	4	-	-	-	-
583	357217.398	5833271.335	5	2	12	2-4	-	-	-	-
584	357217.019	5833271.631	5	3	20	2-5	-	-	-	-
585	357216.762	5833272.302	3	3	26	3-8	-	-	-	-
586	357216.81	5833272.786	1	1	14	8	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
587	357216.431	5833272.607	3	3	24	3-5	-	-	-	-
588	357215.841	5833272.529	3	4	8	2-3	-	-	-	-
589	357215.463	5833272.506	2	3	14	3-8	-	-	-	-
590	357215.966	5833272.016	3	3	11	2-6	-	-	-	-
591	357215.947	5833271.597	3	5	14	2-5	-	-	-	-
592	357216.461	5833271.585	4	3	14	3-7	-	-	-	-
593	357216.705	5833271.377	2	2	17	4-5	-	-	-	-
594	357216.343	5833271.177	3	3	30	2-6	-	-	-	-
595	357216.889	5833270.747	1	1	6	2	-	-	-	-
596	357216.278	5833270.53	3	6	13	2-4	-	-	-	-
597	357215.838	5833270.115	3	3	15	3-7	-	-	-	-
598	357215.814	5833270.705	4	2	20	2-10	-	-	-	-
599	357215.351	5833270.7	3	5	11	2-3	-	-	-	-
600	357215.468	5833271.153	6	3	30	1-6	47	-	-	3
601	357215.249	5833271.554	3	4	13	3-4	-	-	-	-
602	357215.353	5833271.874	5	6	19	1-5	-	-	-	-
603	357214.976	5833272.206	2	3	19	3-4	-	-	-	-
604	357214.468	5833271.909	4	3	15	4-6	-	-	-	-
605	357214.671	5833271.468	2	2	14	4	-	-	-	-
606	357214.8	5833270.865	2	1	14	8	-	-	-	-
607	357214.729	5833270.261	4	5	12	1-4	-	-	-	-
608	357214.855	5833269.918	3	2	10	1-6	-	-	-	-
609	357214.357	5833270.541	3	3	16	4-5	-	-	-	-
610	357214.174	5833270.914	1	1	9	4	-	-	-	-
611	357214.132	5833271.485	2	2	15	3-4	-	-	-	-
612	357213.988	5833271.923	2	2	14	2-5	-	-	-	-
613	357213.569	5833271.578	4	5	8	3-4	-	-	-	-
614	357213.672	5833271.214	5	3	11	3-6	-	-	-	-
615	357213.959	5833270.615	2	3	18	2-6	-	-	-	-
616	357213.995	5833270.101	2	1	8	4	-	-	-	-
617	357214.083	5833269.666	6	3	9	2-4	-	-	-	-
618	357213.693	5833269.386	5	2	11	3	-	-	-	-
619	357213.56	5833269.974	1	1	14	6	-	-	-	-
620	357213.56	5833270.473	6	4	10	1-4	-	-	-	-
621	357213.253	5833270.775	2	3	14	3-4	-	-	-	-
622	357213.161	5833271.355	3	2	6	1-3	-	-	-	-
623	357212.603	5833271.149	2	2	10	2-3	-	-	-	-
624	357212.795	5833270.531	3	3	16	1-3	-	-	-	-
625	357212.936	5833269.822	1	1	12	6	-	-	-	-
626	357213.04	5833269.243	5	10	12	3-5	-	-	-	-
627	357212.698	5833268.884	2	2	11	5-6	-	-	-	-
628	357212.616	5833269.445	3	3	21	2-5	-	-	-	-
629	357212.421	5833269.841	8	4	9	2-6	-	-	-	-
630	357212.099	5833270.069	3	4	8	3-4	-	-	-	-
631	357212.275	5833270.52	5	4	16	3-6	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
632	357212.076	5833270.959	1	1	13	4	-	-	-	-
633	357211.632	5833270.895	4	4	14	2-7	-	-	-	-
634	357211.842	5833270.304	4	5	12	2-7	-	-	-	-
635	357211.719	5833269.824	4	3	19	4	-	-	-	-
636	357211.84	5833269.338	5	3	17	2-4	-	-	-	-
637	357212.214	5833269.223	1	2	16	3-4	-	-	-	-
638	357212.012	5833268.763	6	6	10	4-6	-	-	-	-
639	357211.388	5833268.504	4	3	24	3-6	-	-	-	-
640	357211.416	5833269.404	2	3	8	2-4	-	-	-	-
641	357211.263	5833269.961	7	5	13	3-7	-	-	-	-
642	357210.912	5833270.071	2	3	14	3-5	-	-	-	-
643	357210.882	5833270.506	3	3	21	3-6	-	-	-	-
644	357210.462	5833270.095	4	5	22	5-7	-	-	-	-
645	357210.65	5833269.539	3	5	12	3-5	-	-	-	-
646	357210.237	5833269.486	2	2	22	2-7	-	-	-	-
647	357210.699	5833269.052	2	2	11	2-3	-	-	-	-
648	357210.857	5833268.618	2	3	14	3-6	-	-	-	-
649	357210.876	5833268.181	3	2	21	5-6	-	-	-	-
650	357210.451	5833267.878	2	2	24	5-6	37	-	-	4
651	357210.36	5833268.479	3	6	11	3-6	-	-	-	-
652	357209.969	5833268.76	3	1	15	5	24	-	-	4
653	357209.867	5833269.278	3	3	17	3-4	-	-	-	-
654	357209.622	5833269.878	5	4	24	4-6	-	-	-	-
655	357208.872	5833269.779	6	2	25	2-4	-	-	-	-
656	357208.922	5833269.345	4	4	12	5-6	-	-	-	-
657	357209.197	5833268.89	2	3	18	1-6	-	-	-	-
658	357209.33	5833268.507	4	3	30	1-4	-	-	-	-
659	357209.628	5833268.05	2	1	13	6	-	-	-	-
660	357209.764	5833267.644	3	2	20	3-5	-	-	-	-
661	357209.212	5833267.44	1	1	15	7	-	-	-	-
662	357208.972	5833267.882	3	2	24	4	-	-	-	-
663	357208.869	5833268.247	1	1	15	4	-	-	-	-
664	357208.612	5833268.691	4	2	22	3-5	-	-	-	-
665	357208.559	5833269.09	3	2	18	4-5	-	-	-	-
666	357208.391	5833269.515	2	3	18	2-5	-	-	-	-
667	357207.855	5833269.332	1	1	25	5	-	-	-	-
668	357207.953	5833268.94	1	1	11	4	-	-	-	-
669	357208.126	5833268.538	2	3	26	2-5	-	-	-	-
670	357208.269	5833267.948	1	2	23	3-5	-	-	-	-
671	357208.487	5833267.636	3	4	24	2-5	-	-	-	-
672	357208.686	5833267.274	4	2	15	1-4	-	-	-	-
673	357208.281	5833267.063	5	3	11	3-4	-	-	-	-
674	357208.071	5833267.524	2	2	8	4	-	-	-	-
675	357207.835	5833267.901	2	2	13	1-2	-	-	-	-
676	357207.59	5833268.332	6	2	19	4-5	-	-	-	-
677	357207.493	5833268.808	2	2	15	2-5	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
678	357206.952	5833268.688	4	3	20	3-4	-	-	-	-
679	357206.922	5833268.228	4	3	19	3-4	-	-	-	-
680	357207.102	5833268.105	5	2	14	2	-	-	-	-
681	357207.404	5833268.035	3	4	12	2-5	-	-	-	-
682	357207.129	5833267.841	3	3	12	2-4	-	-	-	-
683	357207.338	5833267.594	5	3	9	3-5	-	-	-	-
684	357207.6	5833267.217	3	2	8	4-5	-	-	-	-
685	357207.454	5833266.894	6	3	15	2	-	-	-	-
686	357207.696	5833266.836	2	2	11	1-6	-	-	-	-
687	357207.323	5833266.656	6	4	10	2-5	-	-	-	-
688	357206.957	5833267.321	2	2	6	4-5	-	-	-	-
689	357206.905	5833267.557	3	2	18	3-5	-	-	-	-
690	357206.658	5833267.754	5	3	16	1-4	-	-	-	-
691	357206.679	5833268.035	2	2	18	2-5	-	-	-	-
692	357206.443	5833268.621	1	1	21	4	-	-	-	-
693	357205.935	5833268.432	3	4	25	3-5	-	-	-	-
694	357206.203	5833267.727	4	3	19	2-5	-	-	-	-
695	357206.051	5833267.388	2	2	18	4	-	-	-	-
696	357206.419	5833267.262	7	3	17	2-4	-	-	-	-
697	357206.177	5833267.01	2	1	9	5	-	-	-	-
698	357206.657	5833266.778	1	1	4	2	-	-	-	-
699	357206.756	5833266.343	4	3	7	3-4	-	-	-	-
700	357206.326	5833266.162	5	2	6	2-6	-	-	-	-
701	357206.1	5833266.673	3	2	13	5-6	-	-	-	-
702	357205.887	5833267.018	6	3	12	2-4	-	-	-	-
703	357205.69	5833267.635	2	3	12	2-4	-	-	-	-
704	357205.438	5833268.182	4	3	17	3-7	-	-	-	-
705	357205.067	5833267.843	5	3	19	2-4	-	-	-	-
706	357204.698	5833267.992	3	2	18	3-5	-	-	-	-
707	357205.222	5833267.322	3	2	30	2-4	-	-	-	-
708	357205.493	5833266.662	3	2	24	3-5	-	-	-	-
709	357205.783	5833266.069	2	3	18	2-5	-	-	-	-
710	357205.512	5833265.954	2	3	8	2-4	-	-	-	-
711	357207.123	5833267.072	1	1	7	4	-	-	-	-
712	357205.298	5833266.378	2	2	11	3	-	-	-	-
713	357204.982	5833266.356	3	2	9	4-5	-	-	-	-
714	357205.123	5833266.763	2	2	8	1-4	-	-	-	-
715	357204.841	5833266.905	3	3	17	2-5	-	-	-	-
716	357204.947	5833267.266	2	2	15	2-5	-	-	-	-
717	357204.668	5833267.511	7	3	23	2-6	-	-	-	-
718	357204.133	5833267.578	4	4	14	2-6	-	-	-	-
719	357204.302	5833267.039	1	1	15	5	-	-	-	-
720	357204.272	5833266.665	5	2	29	4-6	40	-	-	4
721	357204.464	5833266.56	1	2	8	2-4	-	-	-	-
722	357204.741	5833266.088	4	2	14	2-4	-	-	-	-
723	357204.968	5833265.555	3	3	9	1-4	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
724	357204.376	5833265.293	3	4	8	2-3	-	-	-	-
725	357204.102	5833265.671	1	2	8	1-3	-	-	-	-
726	357204.209	5833265.899	1	1	18	3	-	-	-	-
727	357203.991	5833266.256	3	3	9	3-4	-	-	-	-
728	357203.584	5833266.37	3	2	25	2-6	48	-	-	4
729	357203.81	5833266.763	1	1	15	5	-	-	-	-
730	357203.361	5833266.941	4	2	16	2-4	-	-	-	-
731	357203.608	5833267.34	3	4	20	3-5	-	-	-	-
732	357202.907	5833267.052	4	2	17	2-6	-	-	-	-
733	357203.037	5833266.411	5	4	17	2-6	-	-	-	-
734	357202.917	5833266.101	4	4	21	1-4	-	-	-	-
735	357203.407	5833265.917	2	2	10	3	-	-	-	-
736	357203.25	5833265.462	1	1	24	5	-	-	-	-
737	357203.538	5833265.469	2	2	10	3-4	-	-	-	-
738	357203.789	5833265.433	2	2	14	4-5	-	-	-	-
739	357203.737	5833265.031	1	1	13	4	-	-	-	-
740	357203.082	5833264.771	3	3	18	2-5	-	-	-	-
741	357202.847	5833265.27	2	4	11	3-4	-	-	-	-
742	357202.659	5833265.6	2	3	9	3-6	-	-	-	-
743	357202.417	5833266.238	3	2	15	3-5	-	-	-	-
744	357202.497	5833266.588	1	1	27	6	-	-	-	-
745	357202.181	5833266.811	6	4	18	3-7	-	-	-	-
746	357201.631	5833266.627	3	3	19	3-5	-	-	-	-
747	357201.873	5833266.055	5	2	13	3-4	-	-	-	-
748	357201.494	5833265.96	3	3	14	3-5	-	-	-	-
749	357201.61	5833265.667	2	2	17	4	-	-	-	-
750	357201.99	5833265.495	1	2	10	2-3	-	-	-	-
751	357202.15	5833265.078	4	7	11	3-6	-	-	-	-
752	357202.431	5833264.499	4	4	6	3-6	-	-	-	-
753	357201.956	5833264.83	2	2	2	1-2	-	-	-	-
754	357201.82	5833264.315	3	3	11	2-4	-	-	-	-
755	357201.587	5833264.782	2	2	13	3-7	-	-	-	-
756	357201.343	5833265.276	2	3	11	3-5	-	-	-	-
757	357201.248	5833265.805	2	1	12	5	-	-	-	-
758	357200.979	5833266.383	2	2	17	2-6	-	-	-	-
759	357200.364	5833266.093	2	3	22	2-4	-	-	-	-
760	357200.509	5833265.479	4	5	20	2-5	-	-	-	-
761	357200.677	5833264.849	3	2	17	3-5	-	-	-	-
762	357200.975	5833264.43	4	2	5	2-3	-	-	-	-
763	357201.348	5833264.177	3	3	16	2-4	-	-	-	-
764	357201.179	5833264.022	3	5	12	2-5	-	-	-	-
765	357200.642	5833263.8	3	4	13	3-4	-	-	-	-
766	357200.785	5833264.176	4	3	10	2-4	-	-	-	-
767	357200.382	5833264.245	2	2	16	4	-	-	-	-
768	357200.233	5833264.805	2	1	22	6	-	-	-	-
769	357199.959	5833265.262	8	3	17	4-7	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
770	357199.579	5833265.38	2	1	20	5	-	-	-	-
771	357199.771	5833265.718	4	3	17	3-4	-	-	-	-
772	357199.132	5833265.475	4	2	23	4-6	-	-	-	-
773	357199.279	5833264.846	1	2	10	3-4	-	-	-	-
774	357199.489	5833264.394	5	4	13	1-6	-	-	-	-
775	357199.663	5833263.878	4	5	7	2-6	-	-	-	-
776	357200.132	5833263.757	1	1	11	3	-	-	-	-
777	357199.946	5833263.474	6	4	9	3-4	-	-	-	-
778	357199.42	5833263.278	2	2	18	3-5	-	-	-	-
779	357199.142	5833263.766	1	2	7	2-3	-	-	-	-
780	357198.899	5833263.963	5	3	18	1-4	-	-	-	-
781	357199.014	5833264.19	3	3	14	1-2	-	-	-	-
782	357198.577	5833264.349	Not found				-	-	-	-
783	357198.726	5833264.66	3	2	14	3-5	-	-	-	-
784	357198.769	5833265.046	2	1	18	5	23	-	-	4
785	357198.464	5833265.195	4	3	17	3-4	-	-	-	-
786	357198.164	5833264.877	3	4	18	2-4	-	-	-	-
787	357197.844	5833264.942	9	5	17	3-5	-	-	-	-
788	357197.664	5833265.059	2	4	8	3-4	-	-	-	-
789	357197.954	5833264.457	5	5	10	3-4	-	-	-	-
790	357198.243	5833263.917	4	5	19	2-4	-	-	-	-
791	357198.464	5833263.469	2	2	21	1-4	-	-	-	-
792	357198.786	5833263.002	5	5	18	3-5	-	-	-	-
793	357198.117	5833262.716	4	5	17	3-6	-	-	-	-
794	357197.737	5833262.957	2	2	17	2-3	-	-	-	-
795	357197.829	5833263.236	2	2	24	3-7	-	-	-	-
796	357197.66	5833263.686	2	1	18	7	-	-	-	-
797	357197.346	5833264.15	3	4	12	2-6	-	-	-	-
798	357197.488	5833264.489	1	1	21	5	-	-	-	-
799	357197.185	5833264.657	2	3	7	3-6	-	-	-	-
800	357196.615	5833264.427	6	5	25	4-5	-	-	-	-
801	357196.706	5833263.975	4	3	19	4-5	-	-	-	-
802	357197.189	5833263.704	2	2	21	2-3	-	-	-	-
803	357197.009	5833263.534	2	4	24	2-4	-	-	-	-
804	357197.235	5833263.009	5	2	24	5-7	-	-	-	-
805	357197.485	5833262.547	6	3	20	3-7	-	-	-	-
806	357196.904	5833262.352	4	6	214	3-6	-	-	-	-
807	357196.541	5833262.893	3	2	24	4-5	-	-	-	-
808	357196.391	5833263.434	3	3	16	4-5	31	-	-	3
809	357196.082	5833264.022	4	4	23	4-5	-	-	-	-
810	357195.474	5833263.605	5	3	25	3-4	-	-	-	-
811	357195.852	5833263.278	7	3	13	4-6	-	-	-	-
812	357195.648	5833263.16	3	7	14	4-6	30	Yes	1	-
813	357195.948	5833262.514	4	4	24	4-5	-	-	-	-
814	357196.206	5833262.031	4	4	28	1-4	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
815	357195.744	5833261.861	5	4	15	3-6	-	-	-	-
816	357195.382	5833262.36	2	3	17	4-6	-	-	-	-
817	357195.412	5833262.776	1	2	18	3-5	-	-	-	-
818	357195.115	5833262.962	3	2	20	3-8	-	-	-	-
819	357194.865	5833263.545	6	6	18	3-6	-	-	-	-
820	357194.447	5833263.446	2	2	19	2-4	-	-	-	-
821	357194.188	5833263.071	2	3	20	1-5	-	-	-	-
822	357194.477	5833262.978	3	3	18	1-6	-	-	-	-
823	357194.682	5833262.458	5	5	18	3-5	-	-	-	-
824	357194.861	5833262.07	2	3	24	3-5	-	-	-	-
825	357195.171	5833261.568	1	1	12	5	-	-	-	-
826	357194.534	5833261.291	2	3	11	3-4	-	-	-	-
827	357194.175	5833261.835	9	4	25	2-6	-	-	-	-
828	357194.072	5833262.385	2	2	28	4-5	-	-	-	-
829	357193.761	5833263.038	1	1	3	4	-	-	-	-
830	357193.083	5833262.609	1	1	26	4	-	-	-	-
831	357193.382	5833261.997	3	2	28	3-6	-	-	-	-
832	357193.631	5833261.532	2	2	21	3-4	-	-	-	-
833	357194.091	5833261.544	3	2	23	1-5	-	-	-	-
834	357193.977	5833261.004	2	2	17	1-4	-	-	-	-
835	357193.338	5833260.726	4	3	21	3-4	-	-	-	-
836	357193.048	5833261.303	2	2	18	2-6	-	-	-	-
837	357192.953	5833261.834	2	1	29	8	-	-	-	-
838	357192.654	5833262.366	2	2	13	4	-	-	-	-
839	357192.525	5833262.667	2	1	27	7	-	-	-	-
840	357191.795	5833262.357	4	4	18	3-7	-	-	-	-
841	357192.075	5833261.563	7	5	16	2-8	-	-	-	-
842	357192.02	5833261.147	3	3	17	3-5	-	-	-	-
843	357192.396	5833260.987	3	4	24	3-6	-	-	-	-
844	357192.289	5833260.579	5	4	22	3-4	-	-	-	-
845	357192.674	5833260.508	2	1	29	5	12	-	-	4
846	357192.059	5833260.201	4	8	17	3-6	-	-	-	-
847	357191.77	5833260.719	2	3	16	5-7	-	-	-	-
848	357191.599	5833261.301	3	4	21	1-5	-	-	-	-
849	357191.423	5833261.791	4	3	17	3-7	-	-	-	-
850	357191.355	5833262.191	5	8	13	3-5	-	-	-	-
851	357190.687	5833261.787	3	3	14	3-5	-	-	-	-
852	357190.88	5833261.174	2	3	14	3-4	-	-	-	-
853	357191.139	5833260.529	4	4	21	5-7	-	-	-	-
854	357191.454	5833259.974	3	6	20	3-6	-	-	-	-
855	357190.925	5833259.674	3	2	16	4-6	-	-	-	-
856	357190.671	5833260.247	3	4	16	2-6	-	-	-	-
857	357190.465	5833260.77	2	2	19	5-6	-	-	-	-
858	357190.215	5833261.403	2	2	25	3	14	-	-	4
859	357189.564	5833261.483	3	3	16	3-4	-	-	-	-
860	357189.679	5833261.047	3	2	23	2-4	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
861	357189.941	5833260.533	1	2	17	3	-	-	-	-
862	357190.014	5833260.037	4	2	26	7	-	-	-	-
863	357190.244	5833259.49	1	1	19	5	-	-	-	-
864	357189.755	5833259.356	2	3	24	1-5	-	-	-	-
865	357189.676	5833259.851	1	2	7	3-4	-	-	-	-
866	357189.399	5833260.367	3	4	15	3-5	-	-	-	-
867	357189.253	5833260.859	3	2	13	2-3	-	-	-	-
868	357189.183	5833261.326	6	4	15	2-6	-	-	-	-
869	357188.823	5833261.145	5	3	17	3-7	-	-	-	-
870	357188.928	5833260.658	2	2	10	4-5	-	-	-	-
871	357189.085	5833260.216	2	2	15	5	-	-	-	-
872	357189.207	5833259.675	5	4	7	3-4	-	-	-	-
873	357189.364	5833259.1	3	3	12	3-5	-	-	-	-
874	357188.754	5833258.745	5	4	11	3-5	-	-	-	-
875	357188.631	5833259.333	1	1	16	6	-	-	-	-
876	357188.518	5833259.693	3	3	17	3-6	-	-	-	-
877	357188.198	5833260.331	5	5	13	2-4	-	-	-	-
878	357188.177	5833260.798	3	4	14	2-6	-	-	-	-
879	357187.662	5833260.601	3	2	21	6-7	-	-	-	-
880	357187.738	5833260.131	3	4	16	2-5	-	-	-	-
881	357187.917	5833259.625	3	3	9	4-6	-	-	-	-
882	357187.957	5833259.117	4	4	19	3-5	-	-	-	-
883	357188.183	5833258.673	3	2	16	4-6	-	-	-	-
884	357187.57	5833258.223	2	3	31	5-7	-	-	-	-
885	357187.474	5833258.733	2	5	17	3-3	-	-	-	-
886	357187.259	5833259.115	3	2	19	7	-	-	-	-
887	357187.194	5833259.642	2	2	10	1-6	-	-	-	-
888	357186.818	5833260.191	3	2	31	4-6	-	-	-	-
889	357186.351	5833260.023	4	5	20	2-4	-	-	-	-
890	357186.381	5833259.629	2	4	9	3-4	-	-	-	-
891	357186.631	5833259.092	5	5	29	2-6	-	-	-	-
892	357186.837	5833258.615	3	3	21	4-6	-	-	-	-
893	357186.961	5833258.098	1	1	29	7	-	-	-	-
894	357186.376	5833257.928	4	3	27	3-6	-	-	-	-
895	357186.313	5833258.45	3	3	18	3-5	-	-	-	-
896	357186.171	5833258.923	2	2	18	2-5	-	-	-	-
897	357185.924	5833259.599	4	4	25	3-5	-	-	-	-
898	357185.444	5833259.328	3	5	18	3-5	-	-	-	-
899	357185.597	5833258.888	3	3	18	1-7	-	-	-	-
900	357185.748	5833258.292	3	3	16	3-6	-	-	-	-
901	357185.888	5833257.607	2	3	17	4	-	-	-	-
902	357185.327	5833257.443	3	5	10	2-5	-	-	-	-
903	357185.233	5833257.997	3	4	22	3-5	-	-	-	-
904	357185.103	5833258.528	4	3	21	3-5	-	-	-	-
905	357184.922	5833259.112	4	4	16	3-5	-	-	-	-
906	357184.871	5833259.466	2	2	21	3-6	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
907	357184.271	5833259.176	2	3	23	3-5	-	-	-	-
908	357184.32	5833258.637	3	5	11	3-6	-	-	-	-
909	357184.398	5833258.061	4	3	15	3-6	-	-	-	-
910	357184.524	5833257.691	3	2	16	3-4	-	-	-	-
911	357184.769	5833257.13	2	2	13	4-5	-	-	-	-
912	357184.188	5833256.886	3	2	12	5	-	-	-	-
913	357184.188	5833257.44	2	2	12	2-5	-	-	-	-
914	357183.668	5833257.884	2	2	14	1-5	-	-	-	-
915	357183.649	5833258.295	4	4	12	2-4	-	-	-	-
916	357183.64	5833258.743	4	4	18	4-6	-	-	-	-
917	357182.989	5833258.584	3	4	15	3-5	-	-	-	-
918	357183.115	5833258.049	1	1	20	5	-	-	-	-
919	357183.139	5833257.573	5	5	20	1-5	-	-	-	-
920	357183.559	5833257.247	1	1	12	5	-	-	-	-
921	357183.132	5833257.02	6	2	20	2-7	-	-	-	-
922	357183.629	5833256.538	1	2	8	3-4	-	-	-	-
923	357183.125	5833256.391	3	2	13	3-7	-	-	-	-
924	357182.547	5833256.198	5	5	19	2-5	-	-	-	-
925	357182.491	5833256.918	8	5	21	3-6	-	-	-	-
926	357182.442	5833257.321	1	2	6	3-5	-	-	-	-
927	357182.498	5833257.785	4	2	21	4-6	-	-	-	-
928	357182.384	5833258.229	5	4	19	2-4	-	-	-	-
929	357181.729	5833257.851	2	2	20	1-5	-	-	-	-
930	357181.914	5833257.481	3	3	13	3-7	-	-	-	-
931	357182.033	5833257.172	2	2	22	4-7	-	-	-	-
932	357182.215	5833256.631	5	5	23	3-6	-	-	-	-
933	357182.181	5833256.069	2	2	10	3-4	-	-	-	-
934	357181.575	5833255.898	2	4	20	2-7	-	-	-	-
935	357181.745	5833256.643	2	2	19	5-6	-	-	-	-
936	357181.383	5833257.23	1	1	6	3	-	-	-	-
937	357180.952	5833257.784	3	3	21	2-7	-	-	-	-
938	357180.728	5833257.367	2	3	14	2-7	-	-	-	-
939	357180.453	5833257.267	2	3	11	7	-	-	-	-
940	357180.922	5833256.958	5	2	15	3-6	-	-	-	-
941	357181.114	5833256.413	2	2	17	3-6	-	-	-	-
942	357180.98	5833256.035	2	3	27	2-6	-	-	-	-
943	357180.668	5833255.504	3	4	6	1-4	-	-	-	-
944	357180.556	5833256.053	2	2	13	2-3	-	-	-	-
945	357180.403	5833256.63	2	3	10	2-4	-	-	-	-
946	357180.165	5833257.235	2	3	5	2-5	-	-	-	-
947	357179.813	5833257.045	1	3	10	3	-	-	-	-
948	357180.13	5833256.504	2	2	11	2-5	-	-	-	-
949	357179.994	5833256.177	3	3	16	3-4	-	-	-	-
950	357180.23	5833255.551	1	2	8	6	-	-	-	-
951	357180.299	5833255.14	2	3	7	3-5	-	-	-	-
952	357179.893	5833255.191	4	4	15	1-8	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
953	357179.709	5833255.602	3	4	11	2-4	-	-	-	-
954	357179.761	5833255.72	5	2	16	3-6	-	-	-	-
955	357179.404	5833256.349	2	2	19	2-3	-	-	-	-
956	357179.335	5833256.96	1	2	11	3-4	-	-	-	-
957	357179.097	5833256.817	1	1	13	5	-	-	-	-
958	357179.076	5833256.163	3	4	12	3-4	-	-	-	-
959	357179.229	5833255.816	3	2	19	2-5	-	-	-	-
960	357179.346	5833255.42	1	2	17	2	-	-	-	-
961	357179.551	5833254.988	1	1	8	4	-	-	-	-
962	357179.205	5833254.746	3	4	18	4-6	-	-	-	-
963	357179.034	5833255.304	3	4	14	2-4	-	-	-	-
964	357179.058	5833255.771	1	2	12	3	-	-	-	-
965	357178.722	5833256.102	3	3	15	3-4	-	-	-	-
966	357178.811	5833256.632	1	1	15	5	-	-	-	-
967	357178.494	5833256.512	2	3	9	3-4	-	-	-	-
968	357178.178	5833256.355	2	4	15	2-5	-	-	-	-
969	357177.86	5833256.174	2	2	16	2-5	-	-	-	-
970	357178.038	5833256.036	3	4	11	3-4	-	-	-	-
971	357178.419	5833255.956	3	4	13	2-3	-	-	-	-
972	357178.328	5833255.746	5	6	13	2-3	-	-	-	-
973	357178.665	5833255.53	3	4	12	3-5	-	-	-	-
974	357178.681	5833255.02	2	2	16	2-5	-	-	-	-
975	357178.851	5833254.606	3	4	11	3-4	-	-	-	-
976	357178.567	5833254.532	3	4	15	3-4	-	-	-	-
977	357178.353	5833254.933	1	1	19	6	-	-	-	-
978	357178.297	5833255.115	3	3	13	3-5	-	-	-	-
979	357178.114	5833255.391	4	4	15	3-5	-	-	-	-
980	357177.84	5833255.776	2	4	9	2-3	-	-	-	-
981	357177.688	5833256.08	3	4	16	3-6	-	-	-	-
982	357177.412	5833255.991	2	2	13	2-6	-	-	-	-
983	357177.525	5833255.568	3	3	19	1-4	-	-	-	-
984	357177.64	5833255.323	3	3	11	2	47	-	-	3
985	357177.868	5833254.975	3	3	12	2-5	-	-	-	-
986	357178.056	5833254.769	3	5	13	2-5	-	-	-	-
987	357178.193	5833254.275	5	4	27	3-6	-	-	-	-
988	357177.831	5833254.282	3	4	23	3-4	-	-	-	-
989	357177.76	5833254.617	4	2	18	3-5	-	-	-	-
990	357177.692	5833255.016	3	1	11	5	-	-	-	-
991	357177.513	5833255.334	2	3	15	3-6	-	-	-	-
992	357177.216	5833255.802	3	3	12	2-3	-	-	-	-
993	357177.017	5833255.696	4	4	17	2-4	-	-	-	-
994	357176.832	5833255.776	2	5	12	1-3	-	-	-	-
995	357177.001	5833255.232	2	2	12	2-4	-	-	-	-
996	357177.354	5833254.771	1	4	4	2-6	-	-	-	-
997	357177.47	5833254.52	2	2	13	1-4	-	-	-	-
998	357177.509	5833254.246	4	3	11	1-4	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
999	357177.282	5833253.996	2	3	5	2-3	-	-	-	-
1000	357177.073	5833254.323	1	1	20	3	-	-	-	-
1001	357177.004	5833254.639	3	2	14	1-5	-	-	-	-
1002	357176.882	5833255.12	4	4	13	1-5	-	-	-	-
1003	357176.555	5833255.62	3	4	19	2-3	-	-	-	-
1004	357176.117	5833255.343	2	2	6	1-3	-	-	-	-
1005	357176.612	5833255.08	3	2	11	2-3	-	-	-	-
1006	357176.623	5833254.724	3	4	7	3-4	-	-	-	-
1007	357176.921	5833254.312	3	5	14	2-3	-	-	-	-
1008	357176.676	5833253.784	2	3	4	2-4	-	-	-	-
1009	357176.626	5833254.041	1	5	7	2-4	-	-	-	-
1010	357176.504	5833254.268	2	5	7	2-3	-	-	-	-
1011	357176.316	5833254.68	2	3	12	1-3	-	-	-	-
1012	357176.051	5833254.942	1	1	16	5	-	-	-	-
1013	357176.013	5833255.364	3	3	19	1-4	-	-	-	-
1014	357175.69	5833255.245	2	4	11	1-3	-	-	-	-
1015	357175.726	5833254.805	3	4	18	2-3	-	-	-	-
1016	357176.021	5833254.557	3	3	6	1-3	-	-	-	-
1017	357176.145	5833254.312	1	1	14	4	-	-	-	-
1018	357176.303	5833253.909	2	4	9	2-4	-	-	-	-
1019	357176.308	5833253.536	4	4	12	1-7	-	-	-	-
1020	357175.981	5833253.417	3	6	24	3-7	-	-	-	-
1021	357175.844	5833253.759	3	4	21	3-4	-	-	-	-
1022	357175.683	5833254.285	4	6	14	2-4	-	-	-	-
1023	357175.455	5833254.715	2	2	15	2-3	-	-	-	-
1024	357175.343	5833255.202	4	4	14	3-5	-	-	-	-
1025	357175.022	5833255.066	1	1	17	5	-	-	-	-
1026	357174.895	5833254.999	3	4	11	3	-	-	-	-
1027	357174.962	5833254.688	3	2	18	4	-	-	-	-
1028	357175.076	5833254.31	1	1	20	3	-	-	-	-
1029	357175.461	5833253.969	3	4	12	2-4	-	-	-	-
1030	357175.562	5833253.454	2	3	10	2-3	-	-	-	-
1031	357175.431	5833253.09	2	2	13	3-4	-	-	-	-
1032	357175.302	5833253.557	2	2	9	4	-	-	-	-
1033	357175.036	5833253.998	2	2	21	2-4	-	-	-	-
1034	357174.834	5833254.53	1	1	12	5	-	-	-	-
1035	357174.557	5833254.825	3	3	15	3-5	-	-	-	-
1036	357174.231	5833254.827	2	2	16	4	-	-	-	-
1037	357174.471	5833254.267	5	2	22	1-3	-	-	-	-
1038	357174.414	5833254.01	1	1	16	3	-	-	-	-
1039	357174.654	5833253.803	3	2	8	1-2	-	-	-	-
1040	357174.714	5833253.349	1	2	12	1-3	-	-	-	-
1041	357175.007	5833252.907	2	2	15	1-2	-	-	-	-
1042	357174.54	5833252.81	1	2	18	2-5	-	-	-	-
1043	357174.416	5833253.28	3	2	23	5-7	-	-	-	-
1044	357174.284	5833253.699	2	3	22	1-2	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
1045	357174.076	5833254.133	3	2	15	1-3	-	-	-	-
1046	357173.918	5833254.796	3	2	18	3-5	-	-	-	-
1047	357173.421	5833254.528	2	3	21	2-4	-	-	-	-
1048	357173.648	5833254.013	3	3	21	1-7	34	-	-	4
1049	357173.778	5833253.529	3	2	10	1-3	-	-	-	-
1050	357173.892	5833253.079	4	3	19	4-6	45	-	-	4
1051	357174.192	5833252.566	2	2	22	2-4	-	-	-	-
1052	357173.749	5833252.313	3	3	23	3-5	-	-	-	-
1053	357173.452	5833252.648	3	3	15	3-6	-	-	-	-
1054	357173.585	5833252.859	1	1	11	3	-	-	-	-
1055	357173.457	5833253.337	2	2	22	4-6	-	-	-	-
1056	357173.124	5833253.574	2	2	16	6	-	-	-	-
1057	357173.314	5833253.893	4	2	17	2-5	-	-	-	-
1058	357172.931	5833254.337	3	3	28	5-7	41	-	-	4
1059	357172.64	5833254.226	3	2	26	3-6	-	-	-	-
1060	357172.897	5833253.684	1	1	30	6	-	-	-	-
1061	357172.971	5833253.14	5	4	22	2-7	-	-	-	-
1062	357173.166	5833252.655	3	3	14	1-5	-	-	-	-
1063	357173.271	5833252.28	4	3	17	2-6	-	-	-	-
1064	357172.952	5833252.074	3	3	14	3-4	-	-	-	-
1065	357172.887	5833252.537	3	4	9	2-4	-	-	-	-
1066	357172.654	5833253.003	3	2	14	4-5	32	-	-	4
1067	357172.52	5833253.545	8		24	1-6	-	-	-	-
1068	357172.305	5833254.069	1	1	12	4	-	-	-	-
1069	357171.757	5833253.858	5	2	25	5	-	-	-	-
1070	357172.032	5833253.265	1	1	6	4	-	-	-	-
1071	357172.19	5833252.827	1	1	8	5	-	-	-	-
1072	357172.387	5833252.44	1	1	1	1	-	-	-	-
1073	357172.188	5833252.345	4	3	18	2-4	-	-	-	-
1074	357172.49	5833251.724	3	3	11	2-3	-	-	-	-
1075	357172.182	5833251.56	3	3	12	2-3	-	-	-	-
1076	357171.879	5833252.142	2	2	12	2-3	-	-	-	-
1077	357171.722	5833252.599	1	1	9	4	-	-	-	-
1078	357171.63	5833253.123	2	1	7	2	-	-	-	-
1079	357171.541	5833253.439	3	3	17	1-4	-	-	-	-
1080	357171.4	5833253.68	2	1	10	4	-	-	-	-
1081	357171.017	5833253.489	2	3	14	2-3	-	-	-	-
1082	357171.194	5833252.952	3	3	21	2-5	-	-	-	-
1083	357171.282	5833252.455	1	1	6	3	-	-	-	-
1084	357171.326	5833252.086	3	4	16	2-3	-	-	-	-
1085	357171.715	5833251.438	1	1	12	5	-	-	-	-
1086	357171.292	5833251.371	3	3	13	3-6	-	-	-	-
1087	357171.173	5833252.005	2	2	12	3-4	-	-	-	-
1088	357170.924	5833252.371	1	1	13	8	-	-	-	-
1089	357170.763	5833252.768	1	1	13	2	-	-	-	-
1090	357170.638	5833253.282	1	1	12	5	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
1091	357170.125	5833253.078	1	1	15	4	-	-	-	-
1092	357170.14	5833252.618	4	3	27	2-4	-	-	-	-
1093	357170.451	5833252.264	2	3	13	1-4	-	-	-	-
1094	357170.512	5833251.669	1	1	18	7	-	-	-	-
1095	357170.914	5833251.153	1	2	17	2-3	-	-	-	-
1096	357170.527	5833251.03	2	2	23	3-4	-	-	-	-
1097	357170.306	5833251.53	2	3	15	2-4	-	-	-	-
1098	357170.056	5833252.088	1	1	8	4	-	-	-	-
1099	357169.82	5833252.618	1	1	15	4	-	-	-	-
1100	357169.349	5833252.797	1	1	15	5	-	-	-	-
1101	357169.549	5833252.17	2	2	17	1-6	-	-	-	-
1102	357169.843	5833251.363	7	4	15	2-4	-	-	-	-
1103	357170.025	5833250.773	2	2	20	4-5	-	-	-	-
1104	357169.433	5833250.389	6	4	24	3-5	-	-	-	-
1105	357169.301	5833251.184	4	5	21	1-4	-	-	-	-
1106	357169.489	5833251.581	2	2	16	2-6	-	-	-	-
1107	357168.977	5833251.974	1	1	19	3	-	-	-	-
1108	357169.162	5833252.204	2	2	15	3-7	-	-	-	-
1109	357168.958	5833252.661	1	1	16	3	-	-	-	-
1110	357168.637	5833252.332	1	1	14	5	-	-	-	-
1111	357168.145	5833252.286	2	2	27	4	-	-	-	-
1112	357168.31	5833251.599	3	4	14	4-6	-	-	-	-
1113	357168.634	5833250.916	2	2	12	3-4	-	-	-	-
1114	357168.963	5833250.191	3	2	25	5	-	-	-	-
1115	357168.416	5833249.98	4	2	21	3-6	-	-	-	-
1116	357168.547	5833250.47	3	2	26	5-7	-	-	-	-
1117	357168.224	5833250.861	3	2	14	2-3	-	-	-	-
1118	357167.927	5833251.393	2	2	19	2-4	-	-	-	-
1119	357167.875	5833251.76	3	4	11	2-4	-	-	-	-
1120	357167.696	5833252.066	6	2	10	3-4	-	-	-	-
1121	357167.356	5833251.814	1	1	9	6	-	-	-	-
1122	357167.383	5833251.127	1	1	15	4	-	-	-	-
1123	357167.733	5833250.838	2	2	9	2-5	-	-	-	-
1124	357167.64	5833250.663	2	3	12	2-5	-	-	-	-
1125	357167.919	5833250.351	6	4	23	2-4	-	-	-	-
1126	357167.86	5833249.877	1	2	21	1-4	-	-	-	-
1127	357167.475	5833249.636	2	2	14	3-4	-	-	-	-
1128	357167.659	5833250.243	3	3	28	4-6	-	-	-	-
1129	357167.255	5833250.456	4	2	18	1-4	-	-	-	-
1130	357167.027	5833251.119	6	6	23	1-3	-	-	-	-
1131	357166.937	5833251.574	8	3	16	2-6	-	-	-	-
1132	357166.122	5833251.336	1	2	11	3-6	-	-	-	-
1133	357166.233	5833250.802	3	3	14	3-5	-	-	-	-
1134	357166.591	5833250.157	3	3	11	2-5	-	-	-	-
1135	357167.08	5833249.983	6	3	16	1-5	-	-	-	-
1136	357166.914	5833249.604	6	3	17	2-5	-	-	-	-

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence			
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)
1137	357166.387	5833249.34	3	6	15	3-7	-	-	-	-
1138	357165.914	5833249.569	3	2	19	3-5	-	-	-	-
1139	357166.066	5833249.997	2	2	10	1-3	-	-	-	-
1140	357166.268	5833250.506	1	3	16	2-3	-	-	-	-
1141	357165.843	5833250.498	4	7	9	3-5	-	-	-	-
1142	357165.861	5833251.043	2	2	7	4-5	-	-	-	-
1143	357165.549	5833251.227	3	5	12	3-4	-	-	-	-
1144	357165.118	5833250.933	2	4	9	3-6	-	-	-	-
1145	357165.417	5833250.196	2	3	10	2-4	-	-	-	-
1146	357165.566	5833249.528	3	6	7	2-4	-	-	-	-
1147	357165.81	5833249.06	3	3	19	3-4	-	-	-	-
1148	357165.349	5833248.841	2	3	15	2-5	-	-	-	-
1149	357165.112	5833249.423	2	2	15	3-6	-	-	-	-
1150	357164.901	5833250.011	2	4	9	2-3	-	-	-	-
1151	357164.874	5833250.658	2	2	15	2-5	-	-	-	-
1152	357164.209	5833250.252	3	3	13	3-4	-	-	-	-
1153	357164.435	5833249.711	5	3	29	2-3	26	-	-	4
1154	357164.675	5833249.187	5	4	31	3-6	-	-	-	-
1155	357164.724	5833248.681	3	5	6	2-4	-	-	-	-
1156	357164.136	5833248.478	3	2	20	4	-	-	-	-
1157	357164.007	5833248.844	3	3	26	1-6	-	-	-	-
1158	357163.78	5833249.536	4	2	19	4-5	-	-	-	-
1159	357163.58	5833250.119	1	1	13	5	-	-	-	-
1160	357162.827	5833250.114	2	2	14	4-5	-	-	-	-
1161	357163.204	5833249.747	6	2	9	1-5	-	-	-	-
1162	357163.118	5833249.341	2	3	13	3-5	-	-	-	-
1163	357163.532	5833248.975	3	2	15	4-5	-	-	-	-
1164	357163.574	5833248.211	1	1	14	6	-	-	-	-
1165	357163.188	5833248.497	3	3	17	2-4	-	-	-	-
1166	357162.869	5833247.762	2	2	19	3-5	-	-	-	-
1167	357162.799	5833247.719	2	2	14	4	-	-	-	-
1168	357162.351	5833248.266	1	1	16	4	-	-	-	-
1169	357162.349	5833248.622	6	4	21	3-5	-	-	-	-
1170	357162.816	5833248.794	3	2	20	4-6	-	-	-	-
1171	357162.163	5833249.926	1	1	13	3	-	-	-	-
1172	357162.356	5833250.002	2	2	21	2-4	-	-	-	-

Appendix 2 Data for Dianella amoena plants collected from four 3 x 2.7 m quadrats (Quadrats 1 - 4) at Sugarloaf Pipeline easement, Yarra Glen, plant-out site, January - March 2012.

Translocated *Dianella amoena* monitoring – Sugarloaf Pipeline Alliance - Quadrat 1

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				Notes: black - 2011; red - 2012
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	
40	357270.08	5833293.458	2 8	2 4	21 21	7-8 4-8	22 31	5 -	1 -	- 3	
41	357269.892	5833293.818	8 17	4 7	19 19	4-6 2-3	- 42	- -	- -	- 3	
42	357269.638	5833293.938	10 21	7 13	25 32	3-6 2-9	48 77	- -	3 -	1 3	
43	357269.429	5833294.337	2 17	2 7	20 18	3-5 2-4	56 63	- -	3 -	1 3	
44	357269.189	5833294.739	4 12	3 7	24 35	3-10 3-5	- 72	- Y	- -	- 3	
45	357269.081	5833295	9 20	10 20	41 60	3-13 2-6	- 76	- -	- 1	- 3	
46	357269.187	5833295.289	23 29	8 22	42 73	3-10 2-7	- 110	- -	- -	- 3	
47	357268.821	5833295.174	7 23	3 12	29 55	4-11 2-6	- 95	- -	- -	- 3	
48	357268.887	5833294.504	10 25	4 9	21 34	3-4 1-4	40 42	2 -	1-2 3	- 3	
49	357269.099	5833294.225	9 22	5 18	21 27	3-8 2-5	- 39	- 3	- -	- 3	
50	357269.505	5833293.498	6 13	3 6	18 23	2-4 2-4	38 42	- -	- -	1 3	
51	357269.863	5833293.213	7 13	4 8	16 23	2-6 3-4	- 47	- -	- -	- 3	covered by sediment fence
52	357269.618	5833293.025	5 11	2 3	23 22	4-11 2-5	- 17	- -	- -	- -	covered by sediment fence
53	357269.112	5833293.464	9 21	4 15	38 30	3-7 2-6	35 9	31 -	1 -	- 3	
54	357268.896	5833293.81	16 27	9 28	28 45	2-8 2-6	58 61	25 -	1-3 -	1-2 3	
55	357268.648	5833294.247	11 22	4 11	19 32	4-6 1-5	44 77	6 -	1-3 -	1-2 -	3 inflorescences
56	357268.414	5833294.631	12 17	6 33	28 40	3-6 1-4	58 29	- -	- -	1-3 3	3 inflorescences
57	357268.668	5833294.854	13 24	7 29	35 46	5-7 1-7	71 73	12 Y	1-3 1	1-2 3	2 inflorescences
58	357268.359	5833294.973	10 28	8 33	42 67	6-8 1-8	67 99	53 Y	1-2 1	- 3	
59	357267.995	5833294.865	9 32	4 28	36 58	1-12 1-8	64 97	5 -	1-3 -	1-3 3	
60	357267.925	5833294.599	13 54	6 72	36 60	5-11 1-5	80 122	8 -	2-3 -	2-3 3	2 inflorescences
61	357268.009	5833294.067	11 23	8 21	27 31	2-4 3-6	62 53	- -	-- -	1-3 3	3 inflorescences
62	357268.355	5833294.022	9 24	7 23	34 50	3-5 2-5	79 72	- -	-- -	2 3	2 inflorescences
63	357268.523	5833293.774	12 38	8 62	36 55	4-7 1-8	90 82	11 -	1-3 -	1-3 3	7 inflorescences
64	357268.439	5833293.505	9 14	12 20	27 39	2-8 2-3	60 69	12 -	1-3 -	1 3	3 inflorescences, all buds occurred on smallest one
65	357268.884	5833293.161	7 15	6 15	28 33	4-7 1-6	42 51	- -	- -	- 3	snapped and hanging inflorescence
66	357269.163	5833292.853	6 10	5 2	19 25	2-5 4	- 17	- -	- -	- -	covered by sediment fence

Translocated *Dianella amoena* monitoring – Sugarloaf Pipeline Alliance - Quadrat 1

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				Notes: black - 2011; red - 2012
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	
67	357268.678	5833292.652	12 24	8 14	28 41	3-7 3-8	- 15	- -	- -	- -	covered by sediment fence
68	357268.335	5833292.964	6 19	5 16	29 33	3-8 1-6	40 62	- -	- -	1-2 3	
69	357268.089	5833293.382	13 18	5 16	32 41	3-6 2-7	47 70	- -	- -	1-2 3	2 inflorescences
70	357267.852	5833293.657	10 21	3 11	24 35	6-7 1-3	- 62	- -	- -	- 3	
71	357267.62	5833294.015	- 5	- 2	- 34	- 3	- 67	- -	- -	- 3	plant not detected
72	357267.456	5833294.429	15 26	7 17	32 52	3-12 1-2	26 87	- -	3 -	1-3 3	
73	357267.509	5833294.609	9 50	6 49	47 72	2-11 2-6	55 97	23 -	1-2 -	- 3	
74	357267.098	5833294.397	? 23	? 13	? 53	? 2-3	- 102	- -	- -	- 3	
75	357267.311	5833293.879	? 33	? 23	? 49	? 1-7	- 84	- -	- -	- 3	
76	357267.525	5833293.607	? 16	? 13	? 39	? 1-5	- 81	- -	- -	- 3	
77	357267.613	5833293.288	? 24	? 13	? 30	? 1-4	- 75	- -	- -	- 3	
78	357268.03	5833292.964	? 18	? 9	? 32	? 2-7	- 54	- -	- -	- 3	
79	357268.317	5833292.561	9 19	6 13	40 30	4-6 1-2	- 35	- -	- -	- 3	No tag

General Notes: 2011: Southern (private) property sediment fence is loose and needs to be dug in so it does not smother plants, needs weeding, 34 plants monitored in this quadrat.
2012: Similar comments apply; sediment fence is adrift and flapping, damaging plants; weeding badly needed.

Translocated *Dianella amoena* monitoring – Sugarloaf Pipeline Alliance - Quadrat 2 (3 x 2.7 m)												
Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				Notes: black - 2011; red - 2012
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	
367	357240.03	5833280.8	8 9	5 5	34 42	3-10 1-2	62 90	17 -	1-3 -	1-2 3	2 inflorescences / no tag on this plant
368	357239.72	5833281.4	4 20	3 13	30 38	3-6 2-7	64 77	- -	- -	1-2 3	2 inflorescences
369	357239.6	5833281.7	7 17	6 22	42 64	3-7 2-5	70 95	- -	- -	2 3	
370	357239	5833282.2	16 58	12 48	38 39	3-10 2-6	78 100	112 -	1-3 -	1-2 3	7 inflorescences, pest on 1 with clear sticky glue like substance sticking flower buds together in bent over fashion
371	357238.58	5833282.3	5 10	5 11	33 64	3-8 1-3	- 122	- -	- -	- 3	
372	357238.9	5833281.5	7 17	2 13	31 40	3-4 2-8	56 81	58 -	1-3 -	1-2 3	3 inflorescences
373	357239.16	5833280.9	4 24	3 12	30 34	14-15 2-6	66 68	1 -	1-3 -	1 3	3 inflorescences
374	357239.47	5833280.3	10 18	4 16	28 65	3-4 1-12	47 95	15 -	1-3 -	1 3	3 inflorescences - 1 broken off and forming new buds at base of break
375	357239	5833280.1	7 15	2 5	23 33	3-6 1-5	- 71	- -	- -	- 3	
376	357238.58	5833280.4	5 -	2 -	19 -	3-6 -	- -	- -	- -	- -	Very narrow short leaves, yellowing off. No trace of plant, presumed dead.
377	357238.79	5833280.9	14 18	5 14	37 35	3-10 2-5	40 65	- -	- -	2-3 3	2 inflorescences
378	357238.55	5833281.3	10 13	6 22	38 49	3-8 3-7	52 88	47 -	1-3 -	1 3	2 inflorescences
379	357238.42	5833281.8	6 22	6 27	39 47	6-10 2-6	- 66	- -	- -	- 3	
380	357238.01	5833282	6 29	5 29	37 56	5-16 1-5	- 97	- Y	- 1	- 3	
381	357238.05	5833281.4	14 23	6 9	30 38	2-5 1-2	40 54	28 -	1-3 -	1 3	4 inflorescences
382	357238.23	5833280.7	11 25	9 21	24 33	3-5 2-4	44 70	8 -	1-3 -	1-2 3	5 inflorescences
383	357238.39	5833279.9	10 14	5 27	28 45	3-8 1-5	72 89	19 -	1-3 -	1-2 3	3 inflorescences
384	357237.69	5833279.7	- -	- -	- -	- -	- -	- -	- -	- -	No trace of plant, presumed dead.
385	357237.56	5833280.3	? 23	? 12	? 35	? 1-2	- 58	- -	- -	- 3	
386	357237.79	5833280.9	13 -	6 -	23 -	2-12 -	- -	- -	- -	- -	No trace of plant, presumed dead.

General notes: *Dianella* plants in general yellowing and dying off more so in this quadrat than in other quadrats. This quadrat needs weeding. Plants bending and growing towards the light due to overhanging trees adjacent to quadrat - trees need pruning back, 18 plants were monitored in this quadrat but 17 is the number listed for monitoring in the 2010 report - possibly delete plant number 367 as it is just outside the quadrat.

Translocated *Dianella amoena* monitoring – Sugarloaf Pipeline Alliance - Quadrat 3 (continued)

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				Notes: black - 2011; red - 2012
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	
679	357206.922	5833268.228	3 -	3 -	30 -	2-4 -	46 -	- -	- -	- -	All flowers and fruit dropped off. No trace of plant, presumed dead.
680	357207.102	5833268.105	1 27	1 4	29 18	3 1	41 -	- -	- -	1-2 -	
681	357207.404	5833268.035	- -	? -	? -	? -	- -	- -	- -	- -	No trace of plant, presumed dead.
682	357207.129	5833267.841	4 14	4 3	25 30	3-8 1-2	50 36	- -	- -	2-3 3	6 inflorescences.
683	357207.338	5833267.594	7 19	5 12	28 38	5-6 1-3	62 90	- -	- -	1-3 3	
684	357207.6	5833267.217	- ?	? -	? -	? -	- -	- -	- -	- -	Plant not detected.
685	357207.454	5833266.894	4 -	3 -	28 -	2-3 -	39 -	- -	- -	1-3 -	No trace of plant, presumed dead.
686	357207.696	5833266.836	- 18	? 16	? 49	? 1-5	- 80	- -	- -	- 3	
687	357207.323	5833266.656	6 19	5 6	29 44	4-6 3-4	42 71	1-2 -	1-2 -	- 3	
688	357206.957	5833267.321	5 ?	6 -	28 -	2-6 -	- -	- -	- -	- -	2 dead shoots.
689	357206.905	5833267.557	6 ?	4 -	27 -	4-5 -	46 -	3 -	3 -	2-3 -	3 inflorescences. 5 dead shoots.
690	357206.658	5833267.754	2 ?	2 -	22 -	3-5 -	48 -	- -	- -	1-3 -	
691	357206.679	5833268.035	1 5	1 5	30 38	7 1-2	34 63	- -	- -	1-2 3	2 inflorescences, very immature.
692	357206.443	5833268.621	10 18	3 4	33 41	2-7 1	60 -	1-3 -	1-3 -	1-3 -	
693	357205.935	5833268.432	4 18	6 12	35 38	2-5 1-3	56 91	1-3 -	1-3 -	1-2 3	3 inflorescences.
694	357206.203	5833267.727	3 13	3 10	26 36	2-5 1-3	48 57	- -	- -	1-2 3	2 inflorescences, second one dead, no seeds, just old immature buds. 4 dead shoots.
695	357206.051	5833267.388	6 10	4 5	28 26	3-4 2	43 52	- -	- -	1-3 3	4 inflorescences.
696	357206.419	5833267.262	3 4	4 2	25 34	2-3 1-3	42 -	- -	- -	1-3 -	3 inflorescences.
697	357206.177	5833267.01	2 8	2 2	20 25	4-5 1-2	- -	- -	- -	- -	No tag.
698	357206.657	5833266.778	1 -	1 -	13 -	3 -	- -	- -	- -	- -	No trace of plant, presumed dead.
699	357206.756	5833266.343	7 15	3 11	14 42	3-15 1-3	- -	- -	- -	- -	
700	357206.326	5833266.162	14 17	5 8	24 47	1-5 1-6	- -	- -	- -	- -	
701	357206.1	5833266.673	3 8	3 3	29 29	3-6 2	- -	- -	- -	- -	
702	357205.887	5833267.018	3 8	3 2	28 22	3-5 2	- -	- -	- -	- -	
703	357205.69	5833267.635	6 24	3 9	34 44	5-10 2-4	- 62	- -	- -	- 3	

Translocated *Dianella amoena* monitoring – Sugarloaf Pipeline Alliance - Quadrat 3 (continued)											
Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	Notes: black - 2011; red - 2012
704	357205.438	5833268.182	4 13	5 9	58 66	2-7 1-2	66 -	1-3 -	1-3 -	1-2 3	
705	357205.067	5833267.843	4 22	4 10	35 53	2-5 1-3	49 59	10 -	1-3 -	1-2 3	2 inflorescences
706	357204.698	5833267.992	? 19	- 10	? 65	? 1-2	- 92	- Y	- -	- 3	
707	357205.222	5833267.322	? 1	? 3	? 35	? 1-2	- 46	- -	- -	- 3	
708	357205.493	5833266.662	? -	? -	? -	? -	- -	- -	- -	- -	No trace of plant, presumed dead.
709	357205.783	5833266.069	? 27	? 29	? 47	? 1-5	- 83	- -	- -	- 3	
710	357205.512	5833265.954	? 15	? 11	? 54	? 1-2	- 71	- -	- -	- 3	
711	357207.123	5833267.072	6 7	3 3	34 43	4-6 1	56 -	58 -	1-2 -	- -	2 inflorescences - no tag on this plant

General notes: 2011:This quadrat is adjacent to gap in the row of trees that run parallel to the study site immediately next to the fence line. *Dianella's* appeared slightly more vigorous and upright than those in other quadrats. This quadrat needs weeding, 25 plants were found to be located within the quadrat and monitored, however in the 2010 report 26 plants were indicated for monitoring.

2012: Very seriously weed invaded.

Translocated *Dianella amoena* monitoring – Sugarloaf Pipeline Alliance - Quadrat 4 (continued)											
Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				Notes: black - 2011; red - 2012
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	
1025	357175.022	5833255.066	2 3	2 6	34 44	5-6 1-2	- 70				On outer edge of quadrat/no tag.
1026	357174.895	5833254.999	6 13	3 16	33 44	4-19 1-3	55 63	2 -	1-3 -	1-2 3	Inflorescences broken near base.
1027	357174.962	5833254.688	2 4	1 3	37 41	9 1	55 65	43 -	1-3 -	1 3	
1028	357175.076	5833254.31	5 11	4 4	33 34	2-5 1-3	54 50	52 -	1-3 -	1 3	
1029	357175.461	5833253.969	5 16	2 9	37 34	4-7 1-2	91 107	30 -	1-3 -	1-3 3	2 inflorescences/no tag.
1030	357175.562	5833253.454	2 11	1 7	23 32	16 2-4	- 39	- -	- -	- 3	
1031	357175.431	5833253.09	2 10	2 5	36 34	7-9 1-4	- 58	- -	- -	- 3	
1032	357175.302	5833253.557	1 8	1 7	23 36	11 1-3	- 47	- -	- -	- 3	
1033	357175.036	5833253.998	4 22	2 15	35 41	7-15 1-3	51 69	0 -	2-3 -	1-3 3	
1034	357174.834	5833254.53	6 11	2 9	30 42	4-13 2-4	- 62	- -	- -	- 3	
1035	357174.557	5833254.825	8 19	3 10	33 38	4-18 1-3	49 67	28 -	1-3 -	1 3	2 inflorescences.
1036	357174.231	5833254.827	5 -	4 -	26 -	3-4 -	39 -	37 -	1-3 -	1 3	2 inflorescences. At least 5 dead shoots.
1037	357174.471	5833254.267	7 22	2 13	31 43	7-10 2-4	54 67	15 -	- -	1 3	Looked like buds/fruit had largely fallen off.
1038	357174.414	5833254.01	11 54	3 19	41 46	6 2-5	85 85	68 Y	1-3 1	1-3 3	2 inflorescences
1039	357174.654	5833253.803	6 10	2 4	24 18	5-7 1-4	- 44	- -	- -	- 3	
1040	357174.714	5833253.349	8 22	3 12	31 41	4-7 1-5	39 65	- -	- -	1-2 3	Flowers broken, top hanging down.
1041	357175.007	5833252.907	- 16	- 6	? 41	? 2-3	- -	- -	- 3	- -	Dead.
1042	357174.54	5833252.81	9 11	4 10	48 44	3-8 2-7	67 -	7 -	1-3 -	1 3	
1043	357174.416	5833253.28	10 18	5 17	34 58	4-6 2-8	98 -	59 Y	1-3 -	1-3 1	2 inflorescences.
1044	357174.284	5833253.699	4 17	3 13	43 38	5-8 1-6	82 -	8 -	1-3 -	1-2 3	
1045	357174.076	5833254.133	2 13	1 7	39 44	7 1-5	112 -	146 -	1-3 -	1 3	Tip of inflorescence broken, no tag.
1046	357173.918	5833254.796	8 22	2 5	42 40	8 2-5	88 -	24 -	1-3 -	1-3 3	
1047	357173.421	5833254.528	11 25	5 12	42 52	6-13 1-6	99 -	38 -	1-3 -	1-3 3	
1048	357173.648	5833254.013	8 30	4 27	44 56	4-17 2-7	90 -	38 -	1-3 -	1-3 3	2 inflorescences.
1049	357173.778	5833253.529	5 11	2 4	31 40	4-5 2-6	78 -	10 -	1-3 -	1-3 3	
1050	357173.892	5833253.079	13 33	7 14	46 44	5-6 2-5	88 -	57 -	1-3 -	1-3 3	7 inflorescences.

Translocated *Dianella amoena* monitoring – Sugarloaf Pipeline Alliance - Quadrat 4 (continued)												
Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				Notes: black - 2011; red - 2012
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	
1051	357174.192	5833252.566	1 7	1 4	30 30	5 3-8	87 -	25 -	1-3 -	1-3 3	
1052	357173.749	5833252.313	? 13	? 5	? 35	? 2-3	- -	- -	- -	- 3	
1053	357173.452	5833252.648	? -	? -	? -	? -	- -	- -	- -	- -	At least 5 dead shoots.
1054	357173.585	5833252.859	? 14	? 7	? -	? 1-5	- 96	- -	- -	- 3	
1055	357173.457	5833253.337	? 18	? 7	? -	? 2	- 98	- -	- -	- 3	
1056	357173.124	5833253.574	? -	? -	? -	? -	- -	- -	- -	- -	At least 3 dead shoots.
1057	357173.314	5833253.893	1 7	1 2	33 -	4 1	85 62	50 -	1-3 3	1-2 3	Fruit opening but small and green containing black seeds/on outer edge of quadrat/no tag.

General notes: 2011: Plants/flower stalks generally taller, more robust than those in other quadrats - had longer, broader dark green leaves. Ground freshly disturbed, appeared to have been recently weeded, 28 plants were monitored in this quadrat - not sure if 1025 or 1057 should be included as they were just outside the quadrat and in the 2010 report, 27 plants were highlighted for monitoring.

2012: Very seriously weed invaded.

Appendix 3 Quadrat data collected for each of four 3 x 2.7 m subplots in the *Dianella amoena* plant-out site, Sugarloaf Pipeline easement off Gibbs Road, Yarra Glen, 13 January 2012.

Cover abundance values are given in Section 2.4
An asterisk (*) indicates exotic species

Plant species	Cover / abundance values			
	Plot 1	Plot 2	Plot 3	Plot 4
**Acetosella vulgaris*	-	1	-	-
**Agrostis capillaris*	2	2	4	2
**Anagallis arvensis* var. *arvensis*	1	2	1	1
**Anthoxanthum odoratum*	-	-	2	2
**Bromus catharticus*	-	1	-	-
Carex inversa s.l. (tussock-forming)	1	-	-	1
**Centaurium erythraea*	-	1	-	-
**Conyza sumatrensis*	+	-	-	-
Dianella amoena	2 (20%)	2 (1m^2)	1 (0.12m^2)	1
Dichondra repens	1	1	-	-
**Ehrharta erecta*	+	1	-	1
Epilobium hirtigerum	+	+	-	1
**Eucalyptus camaldulensis*	-	-	-	1
Euchiton involucratus	-	+	-	-
**Euphorbia peplus*	1	1	1	1
Geranium sp. 2	1	-	-	-
Helichrysum luteoalbum	-	1	-	-
**Holcus lanatus*	-	1	-	1
Hypercium gramineum s.l.	-	+	+	-
**Hypochaeris radicata*	-	1	2	+
Juncus gregiflorus	-	2	1	-
Juncus sarophorus	-	-	1	-
Juncus subsecundus	1	2	1	1
Lachnagrostis filiformis	1	1	1	1
**Lactuca serriola*	-	-	-	+
**Leontodon taraxacoides*	-	-	1	-
**Lolium perenne*	-	1	1	-
**Lotus corniculatus*	-	+	-	-
**Lotus uliginosus*	1	2	1	1
Lythrum hyssopifolia	1	1	+	-
Microlaena stipoides	+	1	1	1
Oxalis exilis	1	1	-	1
Poa labillardierei var. *labillardierei*	-	1	-	-
Poa morrisii	+	1	-	-
**Paspalum dilatatum*	-	1	-	+

**Plantago lanceolata*	1	1	1	-
**Romulea rosea* var. *australis*	1	1		1
Rytidosperma pilosum	-	2	2	2
Rytidosperma racemosum	1	2	1	2
Rytidosperma semiannulare	1	-	-	-
Rytidosperma setaceum	1	2	2	2
Schoenus apogon	+	+	-	-
**Sisyrinchium iridifolium*	1	1	-	-
**Sonchus asper*	+	-	-	-
**Sonchus oleraceus*	1	-	1	-
**Stachys arvensis*	+	-	-	-
**Tribolium acutiflorum*	-	-	-	1
**Trifolium fragiferum*	-	-	2	-
**Trifolium glomeratum*	1	1	-	1
**Trifolium repens*	1	2	4	-
**Vicia tetrasperma*	+	-	-	-
**Vulpia* sp.	1	1	+	-
Bare ground	25%	<0.5m^2	0	<1%
*Number of species (indigenous/*exotic)*	31 (15/*16)	37 (18/*19)	24 (12/*12)	23 (10/*13)

Appendix 4 4 Coordinates and data collected for Hybrid Flax-lily (Dianella amoena x D. admixta) receptor site (Hunts Lane - north), Melba Highway, Steels Creek, May 2012.

Note: Black print is May 2010 data; red print is May 2012 data

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)		No. shoots		Max. leaf length (cm)		No. leaves /shoot (range)		Inflorescence/infructescence								Comments
											Height (cm)		Buds		Flowering (1 - 3)		Fruiting (1 - 3)		
	Easting	Northing																	
1	359656.384	5839340.687	4	19	3	6	16	29	3-5	3-6	-	-	-	-	-	-	-	-	
2	359656.854	5839340.266	5	14	5	5	23	15	2-5	2-5	-	-	-	-	-	-	-	-	
3	359657.260	5839340.012	4	2	3	1	19	26	2-5	6	-	-	-	-	-	-	-	-	
4	359657.525	5839340.588	2	-	2	-	23	-	3-5	-	-	-	-	-	-	-	-	-	
5	359658.523	5839340.984	3	1	3	1	18	18	1-5	4	-	-	-	-	-	-	-	-	Plant missing but new tag placed by old tag
6	359658.003	5839341.251	3	1	3	1	20	16	1-5	6	-	-	-	-	-	-	-	-	
7	359657.397	5839341.331	6	1	5	1	20	15	2-6	5	-	-	-	-	-	-	-	-	
8	359657.389	5839341.808	2	25	3	5	21	15	3-5	3-6	-	-	-	-	-	-	-	-	
9	359656.986	5839341.277	4	-	3	-	17	-	4-4	-	-	-	-	-	-	-	-	-	Plant not found
10	359656.181	5839341.152	3	9	4	4	18	26	1-5	3-6	-	-	-	-	-	-	-	-	
11	359655.387	5839340.018	2	1	1	1	22	19	6	4	-	-	-	-	-	-	-	-	
12	359655.113	5839339.375	2	5	2	3	17	26	1-5	2-7	-	-	-	-	-	-	-	-	
13	359654.762	5839338.663	4	4	4	3	16	33	2-5	2-4	-	-	-	-	-	-	-	-	
14	359654.5305	5839338.161	4	1	4	1	16	36	2-3	4	-	-	-	-	-	-	-	-	
15	359655.446	5839338.747	4	11	3	5	17	25	3-3	1-5	-	-	-	-	-	-	-	-	
16	359655.822	5839339.225	3	9	2	2	12	26	2-3	1-4	-	-	-	-	-	-	-	-	
17	359655.882	5839340.062	7	10	5	5	20	17	1-5	2-4	-	-	-	-	-	-		-	
18	359656.184	5839340.455	7	15	4	3	4	17	2-6	3-6	-	-	-	-	-	-		-	
19	359658.099	5839341.836	5	9	4	5	24	16	2-3	1-4	-	-	-	-	-	-		-	
20	359657.173	5839340.906	2	1	1	1	23	13	1	3	-	-	-	-	-	-		-	

Appendix 5 Co-ordinates and data collected for Matted Flax-lily (Dianella amoena) receptor site (Hunts Lane - south), Melba Highway, Steels Creek, May 2012.

Plant no.	Coordinates (GDA94)		Plant basal diam. (cm)	No. shoots	Max. leaf length (cm)	No. leaves /shoot (range)	Inflorescence/infructescence				Comments
	Easting	Northing					Height (cm)	Buds	Flowering (1 - 3)	Fruiting (1 - 3)	
1	359656.384	5839340.687	12	9	23	3-7	-	-	-	-	
2	359656.854	5839340.266	19	12	21	1-7	-	-	-	-	Several shoots cropped; damaged with weeding
3	359657.260	5839340.012	24	11	20	2-6	-	-	-	-	Several shoots cropped
4	359657.525	5839340.588	29	23	32	2-7	-	-	-	-	
5	359658.523	5839340.984	30	22	25	3-7	-	-	-	-	Many shoots cropped
6	359658.003	5839341.251	23	16	20	3-7	-	-	-	-	
7	359657.397	5839341.331	20	17	20	3-8	-	-	-	-	
8	359657.389	5839341.808	30	10	20	2-12	-	-	-	-	Damaged with weeding
9	359656.986	5839341.277	12	15	23	3-10	-	-	-	-	
10	359656.181	5839341.152	18	13	29	4-13	-	-	-	-	Damaged with weeding
11	359655.387	5839340.018	17	11	24	3-6	-	-	-	-	Damaged with weeding
12	359655.113	5839339.375	21	15	19	1-7	-	-	-	-	
13	359654.762	5839338.663	0?	0?	-	-	-	-	-	-	Shoot found on 17/5/2012 but not found on 24/5/12
14	359654.5305	5839338.161	0	0	-	-	-	-	-	-	
15	359655.446	5839338.747	25	12	21	5-9	-	-	-	-	
16	359655.822	5839339.225	11	7	25	3-8	-	-	-	-	
17	359655.882	5839340.062	22	16	29	2-9	-	-	-	-	
18	359656.184	5839340.455	2	4	24	3-8	-	-	-	-	
19	359658.099	5839341.836	14	2	38	2-5	-	-	-	-	
20	359657.173	5839340.906	12	4	31	2-7	-	-	-	-	Not found on 17/5/2012 but found well off the relative position on the waypoint plots

Appendix 6 Quadrat data collected in road reserve, Melba Highway, to the north and south of Hunts Lane, Steels Creek, at Matted Flax-lily (*Dianella amoena*) and Hybrid Flax-Lily (*D. amoena* x *D. admixta*) sites, March - May 2012

Quadrat 01 E2713777 **Hunts Lane north (quadrat c. 10 x 8 m)**

Recs 36 Date: 16 Mar 2012 Location: 145°24'39" 37°35'05" Collector: GWCarr :

2	153		*	*Agrostis capillaris*	Brown-top Bent
3	236		*	*Anthoxanthum odoratum*	Sweet Vernal-grass
1	4942			*Austrostipa rudis subsp. rudis*	Veined Spear-grass
1	498		*	*Bromus catharticus*	Prairie Grass
1	642			*Carex inversa*	Knob Sedge
1	702		*	*Centaurium erythraea*	Common Centaury
1	4554		*	*Cynodon dactylon var. dactylon*	Couch
1	948		*	*Dactylis glomerata*	Cocksfoot
1	5555			*Dianella admixta*	Black-anther Flax-lily
1	5084	E	e	*Dianella amoena*	Matted Flax-lily
+	1128		*	*Ehrharta erecta var. erecta*	Panic Veldt-grass
+	8398		*	*Eragrostis spp.*	Love Grass
1	3828			*Eucalyptus radiata subsp. radiata*	Narrow-leaf Peppermint
1	1394			*Gahnia radula*	Thatch Saw-sedge
+	4336		*	*Gamochaeta purpurea s.s.*	Spiked Cudweed
+	1489			*Gonocarpus tetragynus*	Common Raspwort
3	1692		*	*Holcus lanatus*	Yorkshire Fog
2	1748		*	*Hypochaeris radicata*	Flatweed
1	1956			*Leptospermum continentale*	Prickly Tea-tree
1	2179			*Microlaena stipoides var. stipoides*	Weeping Grass
+	2381			*Oxalis exilis*	Shady Wood-sorrel
2	2430		*	*Paspalum dilatatum*	Paspalum
+	4819			*Pimelea linifolia subsp. linifolia*	Slender Rice-flower
1	2561		*	*Plantago lanceolata*	Ribwort
1	2777			*Pteridium esculentum*	Austral Bracken
1	2959		*	*Rubus anglocandicans*	Common Blackberry
+	973			*Rytidosperma pallidum*	Silvertop Wallaby-grass
1	977			*Rytidosperma racemosum var. racemosum*	Slender Wallaby-grass
1	3039			*Schoenus apogon*	Common Bog-sedge
+	3124			*Senecio quadridentatus*	Cotton Fireweed
1	3133		*	*Setaria parviflora*	Slender Pigeon Grass
1	5322		*	*Solanum nigrum s.s.*	Black Nightshade
+	3203		*	*Sonchus asper s.l.*	Rough Sow-thistle
1	3204		*	*Sonchus oleraceus*	Common Sow-thistle
+	3562		*	*Watsonia meriana var. bulbillifera*	Bulbil Watsonia

Quadrat 02 E2713778 **Hunts Lane south (quadrat c. 15 x 8 m)**

Recs 22 Date: 16 Mar 2012 Location: 145°24'38" 37°34'56" Collector: GWCarr

2	57		*Acacia melanoxylon*	Blackwood
2	153	*	*Agrostis capillaris*	Brown-top Bent
1	236	*	*Anthoxanthum odoratum*	Sweet Vernal-grass
1	255	*	*Arctotheca calendula*	Cape Weed
1	4942		*Austrostipa rudis subsp. rudis*	Veined Spear-grass
1	498	*	*Bromus catharticus*	Prairie Grass
+	810	*	*Conyza sumatrensis*	Tall Fleabane
3	4554	*	*Cynodon dactylon var. dactylon*	Couch
2	948	*	*Dactylis glomerata*	Cocksfoot
1	5555		*Dianella admixta*	Black-anther Flax-lily
1	5084		*Dianella amoena*	Matted Flax-lily
1	1128	*	*Ehrharta erecta var. erecta*	Panic Veldt-grass
2	3828		*Eucalyptus radiata subsp. radiata*	Narrow-leaf Peppermint
1	1692	*	*Holcus lanatus*	Yorkshire Fog
1	1748	*	*Hypochaeris radicata*	Flatweed
1	2042		*Lomandra filiformis*	Wattle Mat-rush
2	2179		*Microlaena stipoides var. stipoides*	Weeping Grass
+	2376	*	*Oxalis articulata*	Sourgrass
+	2381		*Oxalis exilis*	Shady Wood-sorrel
1	2430	*	*Paspalum dilatatum*	Paspalum
1	2561	*	*Plantago lanceolata*	Ribwort
+	2959	*	*Rubus anglocandicans*	Common Blackberry
1	3226	*	*Sporobolus africanus*	Rat-tail Grass

Appendix 7 Plant species recorded at Dianella amoena Matted Flax-lily sites, Melba Highway north and south of Hunts Lane, Steels Creek, 11 January 2011 and 13 January 2012.

An asterisk (*) denotes exotic species.

(M - weed species that should be managed to protect *Dianella* populations.)

	Scientific Name	Common Name
	Acacia melanoxylon	Blackwood
*	*Agrostis capillaris* M	Brown-top Bent
*	*Anthoxanthum odoratum* M	Sweet Vernal-grass
*	*Arctotheca calendula*	Cape Weed
	Austrostipa rudis subsp. *rudis*	Veined Spear-grass
*	*Bromus catharticus* M	Prairie Grass
	Carex inversa	Knob Sedge
*	*Centaurium erythraea*	Common Centaury
*	*Conyza sumatrensis*	Tall Fleabane
*	*Cynodon dactylon* var. *dactylon* M	Couch
*	*Dactylis glomerata* M	Cocksfoot
	Dianella admixta	Black-anther Flax-lily
	Dianella amoera x *D. admixta*	Hybrid Flax-lily
	Dianella amoena	Matted Flax-lily
*	*Ehrharta erecta* var. *erecta* M	Panic Veldt-grass
*	*Eragrostis spp.*	Love Grass
	Eucalyptus radiata subsp. *radiata*	Narrow-leaf Peppermint
	Gahnia radula	Thatch Saw-sedge
*	*Gamochaeta purpurea s.s.*	Spiked Cudweed
	Gonocarpus tetragynus	Common Raspwort
*	*Holcus lanatus* M	Yorkshire Fog
*	*Hypochaeris radicata* M	Flatweed
	Leptospermum continentale	Prickly Tea-tree
	Lomandra filiformis	Wattle Mat-rush
	Microlaena stipoides var. *stipoides*	Weeping Grass
*	*Oxalis articulata* M	Sourgrass
	Oxalis exilis M	Shady Wood-sorrel
*	*Paspalum dilatatum*	Paspalum

	Scientific Name	Common Name
	Pimelea linifolia subsp. *linifolia*	Slender Rice-flower
*	*Plantago lanceolata* M	Ribwort
	Pteridium esculentum	Austral Bracken
*	*Rubus anglocandicans* M	Common Blackberry
	Rytidosperma pallidum	Silvertop Wallaby-grass
	Rytidosperma racemosum	Slender Wallaby-grass
	Schoenus apogon	Common Bog-sedge
	Senecio quadridentatus	Cotton Fireweed
*	*Setaria parviflora* M	Slender Pigeon Grass
*	*Solanum nigrum* M	Black Nightshade
*	*Sonchus asper.* M	Rough Sow-thistle
*	*Sonchus oleraceus* M	Common Sow-thistle
*	*Sporobolus africanus* M	Rat-tail Grass
*	*Watsonia meriana* var. *bulbillifera* M	Bulbil Watsonia