



# **DRL26**

## **Rotary Increment Dendrometer**

# DRL26 Logging Dendrometer

## DRL26

Rotary Dendrometer  
Increment Sensor

## IRCABLE

IrDA/USB infrared adaptor

## DBTAPE

15 metre 12mm stainless  
steel tape



<http://www.ictinternational.com.au/>

# Main Features

- Rotary position sensor
- Step-less reading
- No upper limit in stem diameter
- Built-in datalogger
- IR data access
- Optional internal temperature logging
- Non-invasive fixing
- High resolution (1 $\mu$ m)

# DRL26 Applications

- Trunk Growth Monitoring
- Irrigation Management





# Case Study: Kamarooka Saline Woodlot





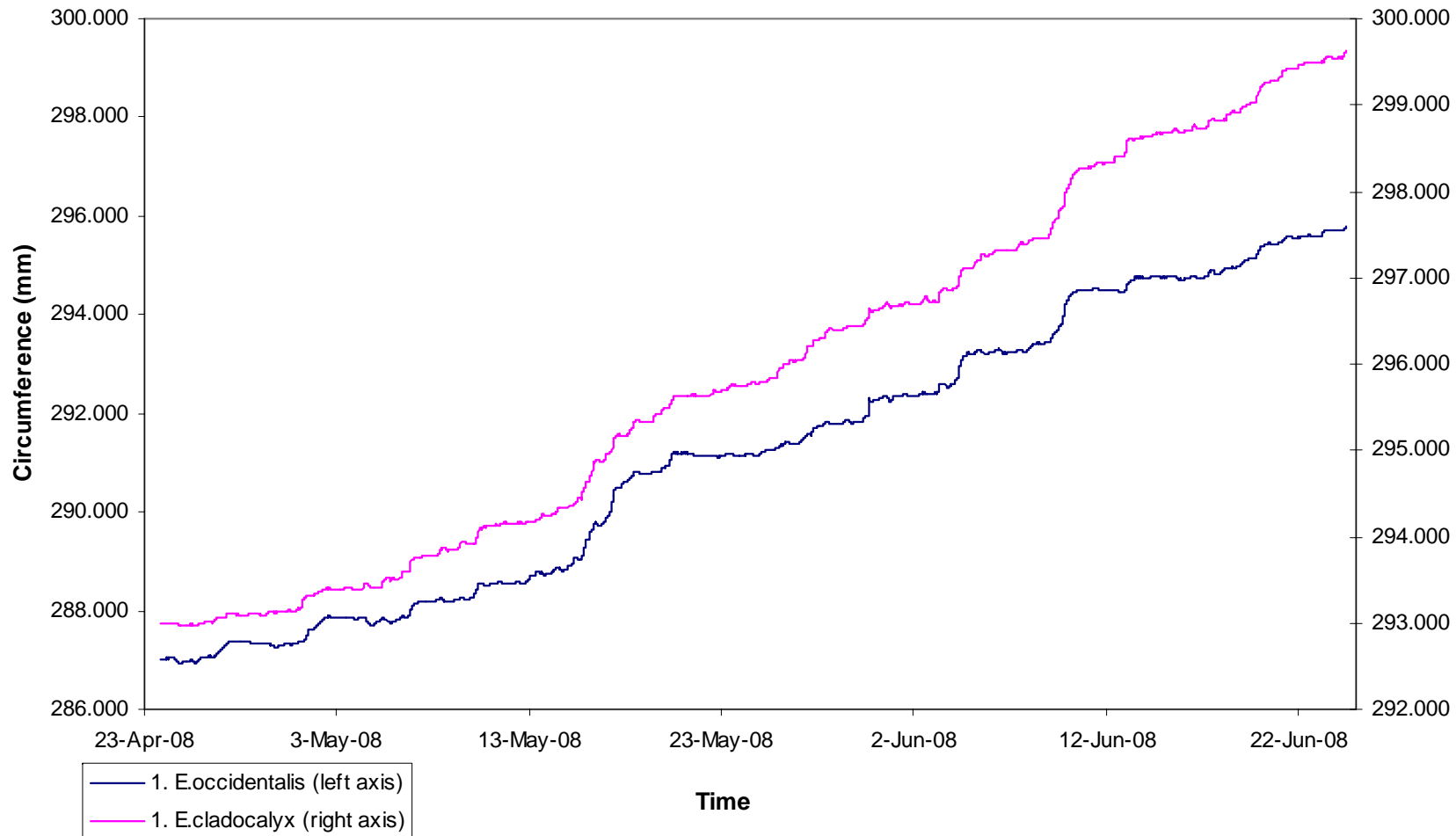
## **E. occidentalis**



## **E. cladocalyx**

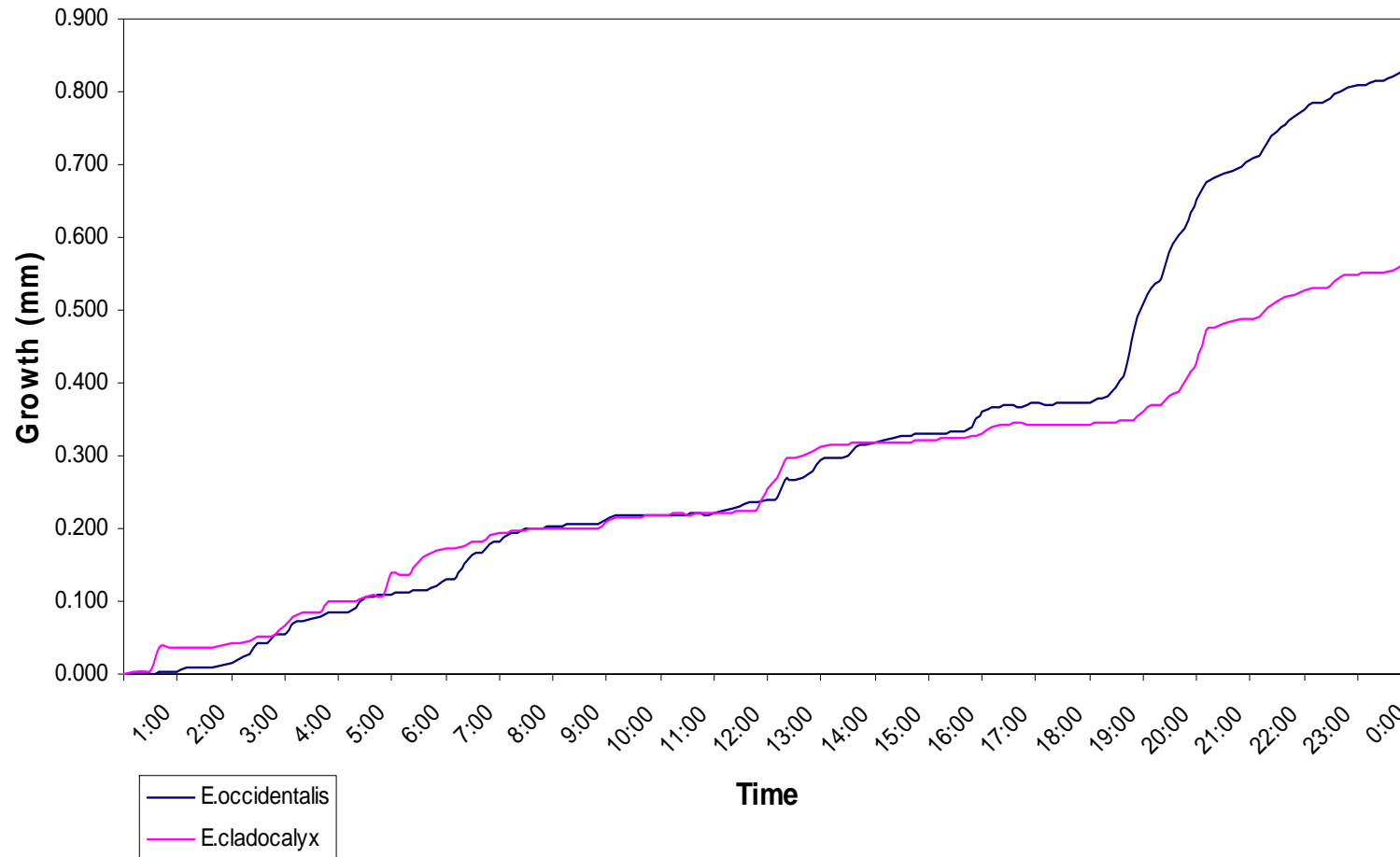


# Tree Circumference Monitoring 23/4 – 24/6



# June 9, 2008

Tree circumference variation over 24 hours - 9th June





# Specifications

- Minimum stem diameter 8 cm
- Increment range 65 mm
- Resolution 1 micrometer ( $\mu\text{m}$ )
- Linearity 2% over full range
- Memory capacity 50,000 readings (4 years at hourly readings)
- Battery capacity approx. 5 years at hourly logging interval
- Tightening strength 15 to 20 N
- Temperature measurement accuracy  $\pm 2$  deg.C

# References

- **Ježík, M., Blaženec, M. and Strelcová, K. 2007**, 'Intraseasonal stem circumference oscillations: their connection to weather course', *Oecologia*, vol. 34, no. 2, pp. 105-115.
- **Lagergren, F. and Lindroth, A. 2004**, 'Variation in sapflow and stem growth in relation to tree size, competition and thinning in a mixed forest of pine and spruce in Sweden', *Forest Ecology and Management*, vol. 188, pp. 51-63.
- **Irvine, J., Law, B.E., Kurpius, M.R., Anthoni, P.M., Moore, D. and Schwarz, P.A. 2004**, 'Age-related changes in ecosystem structure and function and effects on water and carbon exchange in ponderosa pine', *Tree Physiology*, vol. 24, pp. 753-763.





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