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| **Bibliography** | Ivancic, A.; Roupsard, O.; Quero Garcia, J.; Lebot, V.; Pochyla, V.; Okpul, T. (2011) Thermogenic flowering of the giant taro (Alocasia macrorrhizos, Araceae), In: Canadian Journal of Botany, Vol.83 (6), 647-655, URL: https://www.researchgate.net/publication/237155077\_Thermogenic\_flowering\_of\_the\_giant\_taro\_Alocasia\_macrorrhizos\_Araceae |
| **Associated conference** |  |
| **Abstract / Content summary** | The investigations of thermogenesis of Alocasia macrorrhizos (L.) G. Don inflorescences took place from December 2002 to February 2003, and from February 2004 to March 2004, in one of the wild populations on Espiritu Santo, Vanuatu (South Pacific). Temperatures were measured with six Copper-Constantan (type T) infra-millimetric thermocouples wired to a Campbell Scientific 10X data logger. The thermogenic period lasted 36–42 h, and heating was documented on the male part and the sterile appendix. The highest temperatures were recorded on the sterile appendix. They started to rise slightly before midnight and peaked between 0545 and 0600, when the inflorescence odour became the most intense. The average maximum temperature of 59 investigated inflorescences was 43.9 ± 0.6 °C. The absolute maximum was 47.4 °C. The maximum deviation from the ambient air temperature was 25.6 °C. The heating of the male part began 10–15 h before the inflorescence odour became the most intense and ended 2–3 h after the release of pollen. Its temperatures had two peaks: the first one appeared 15 min after the temperature peak of the sterile appendix, whereas the second one appeared at the time of the release of pollen. The dominating visitors of
the flowering inflorescences were earwigs (Labidura truncata Kirby, Labiduridae, Dermaptera). Seed set was extremely rare.
Key words: giant taro, Alocasia macrorrhizos, thermogenesis, inflorescence development, pollination. |
| **identifier** | | DOI: 10.1139/b05-040 |
| **Library Locations** |  |
| **files** |  |
| **External web link** | https://www.researchgate.net/publication/237155077\_Thermogenic\_flowering\_of\_the\_giant\_taro\_Alocasia\_macrorrhizos\_Araceae |
| **File info** | 409.11 KB |