A stinking problem: novel control solutions and threat mitigation for invasive *Passiflora foetida* in the Kimberley and Pilbara

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Summary Stinking passionflower (*Passiflora foetida* L.) is a vine from South and Central America that has been widely introduced into many tropical regions of the world. Across the Kimberley and Pilbara regions of north western Australia, it is considered to be one of the most significant weed problems in landscapes of high biodiversity, cultural and historical value.

Current control methods (spraying, hand-pulling) are costly (particularly in remote areas), labour intensive, and have minimal impact on long-term control. A major impediment for developing effective control strategies for stinking passionflower is that very little is known about its biology and life history. In the long term, however, the only practical solution will be implementing a biological control solution.

Our research program represents the beginning of that process. Here we document our findings to this point, providing examples of (i) the population dynamics of the weed across the Kimberley and Pilbara, (ii) its impact on high value landscapes from a biodiversity, cultural and historical perspective, and (iii) the progress towards a biological control solution to improve the efficiency and effectiveness of management.

The insights obtained support the idea that stinking passionflower represents a significant threat to iconic ecosystem values in the Kimberley and Pilbara and that this plant remains a high priority target for management via biological control.

Keywords Stinking passionflower, weed, management, impact, ecosystem values, biodiversity, biological control.