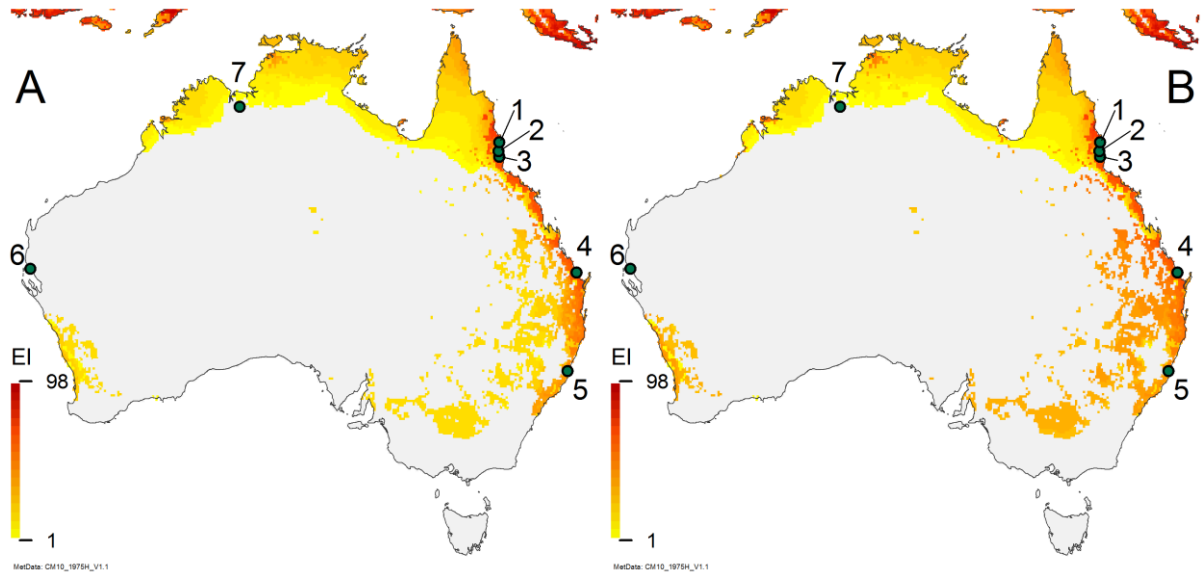


Fig S5. Composite map of the modelled climate suitability of Australia for *P. fijiensis*, based on identified irrigation areas [1]. (A) Composite of natural rainfall and 5 mm day⁻¹ top-up irrigation; (B) composite of natural rainfall and 7 mm day⁻¹ top-up irrigation.. 1 = Babinda; 2 = Tully; 3 = Cardwell; 4 = Bundaberg; 5 = Kempsey; 6 = Carnarvon; 7 = Kununurra.



Banana production in Australia generally requires irrigation [2, 3]. Increased irrigation enhances the projected suitability of many regions of Australia. Neither Carnarvon (6) nor Kununurra (7) are suitable for the establishment and persistence of *P. fijiensis* under a natural rainfall scenario (Fig 2a, Fig S2): Kununurra because of excessive Heat Stress, Carnarvon because of excessive Dry Stress. At Kununurra (7), a 7 mm day⁻¹ top-up irrigation scenario is necessary to allow growth during the cooler months (see also Fig S6b). At Carnarvon (6), the 5 mm day⁻¹ top up irrigation scenario is sufficient to remove the restrictions of Dry Stress and enable growth to occur in all but the driest couple of months, and the 7 mm day⁻¹ top up irrigation scenario enables growth throughout the year (Fig S7). Unfortunately, it would appear that this area is not yet indicated as an irrigated agricultural area [1], and so does not show up as being suitable in these maps (Fig 2b, Fig S5).

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