

SHORT COMMUNICATION

Triunia kittredgei Olde (Proteaceae): a name to be rejected

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Triunia Lour. is a genus of four species endemic to eastern Australia (Foreman 1995). Two species (*Triunia erythrocarpa* Foreman, *T. montana* (C.T.White) Foreman) occur in the Wet Tropics of northeastern Queensland and two species (*T. robusta* (C.T.White) Foreman, *T. youngiana* (C.Moore & F.Muell. ex F.Muell.) L.A.S.Johnson & B.G.Briggs) occur in southeastern Queensland (SE Qld), with the latter also found in adjacent parts of New South Wales. In this note we examine the typification and application of several of these names; in particular we address what is the correct name to be applied to the iconic threatened species in SE Qld (Forster *et al.* 1990; Shapcott 2002; Powell *et al.* 2005) that is known as *T. robusta* (*cf.* Olde 2015).

Chronology of Events

White (1933) described *Helicia youngiana* var. *robusta* C.T.White (= *Triunia robusta* (C.T.White) Foreman) without nominating a type. He provided a detailed description of the taxon: ‘2. var. **robusta**, n. var. Leaves mostly entire but sometimes toothed and deeply so towards the top, up to 20 cm. long and 5.5 cm. wide, smooth and very shining above. Racemes up to 10 cm. long; pedicels up to 7 mm. long, hairy but much less so than in the type [var. typical], buds cylindrical 1.5 cm. long, individual bracts up to 1 cm. long and 4 mm. wide. Fruits (in the dried state) subglobose, 2.5 cm. long, 2 cm. diam.’

White cited eight specimen collections from his examination of material at BRI, MEL and NSW but did not indicate the herbaria where the specimens were held. Seven of

these specimen collections are from SE Qld and one collection from northeastern Qld, *viz.*

SE Queensland collections:

Maroochy [Maroochie], [July ?1888] *F.M. Bailey s.n.* (BRI [AQ317456], MEL 2277223A *n.v.*): flowering specimen

Maroochy [Maroochie], *s.dat.*, *J. Low s.n.* (BRI [AQ317464], MEL 2277222A *n.v.*): flowering specimen

Eumundi, [Nov 1894], *J.F. Bailey & J.H. Simmonds s.n.* (BRI [AQ317466], MEL 2277221A *n.v.*): flowering specimen

Eumundi, [Nov 1892], *J.H. Simmonds s.n.* (BRI [AQ317462], MEL *n.v.*, NSW *n.v.*): flowering specimen

Eumundi, [Nov 1900], *J.F. Bailey s.n.* (BRI [AQ317470], MEL 2277219A *n.v.*, MEL 2277220A *n.v.*, NSW 169006 *n.v.*): flowering specimen

Eumundi, [May 1892], *J. F. Bailey & J.H. Simmonds s.n.* (BRI [AQ104858]): fruiting specimen

Eumundi, Oct 1911, *J.B. Staer s.n.* (NSW 169005 *n.v.*)

NE Queensland collection:

East Malanda, Atherton Tableland, Sep 1929, *S.F. Kajewski I219* (BRI, A *n.v.*, K, NY, S): specimen in bud

Discussion

The SE Qld specimens have been classified as *Triunia robusta* and the NE Qld specimen as *T. erythrocarpa* following Foreman (1986, 1987, 1995) until the recent account of Olde (2015).

Sleumer (1955) in his review of *Helicia* Lour. accepted White's *Helicia youngiana* var. *robusta* and selected as lectotype *Kajewski 1219* at NSW '(lecto-typus haud vidi)' but this specimen does not exist at NSW (see Olde 2015). Isolectotypes of *Kajewski 1219* that Sleumer did see are at A, K, NY and S.

Foreman (1986) did not accept Sleumer's earlier lectotypification and selected *Simmonds s.n.* (BRI AQ317462) at BRI as lectotype for *Helicia youngiana* var. *robusta*. Foreman (1986) transferred White's variety to *Triunia* and raised it to species rank as *Triunia robusta*.

Olde (2015) has asserted that Foreman's (1986) lectotypification of *Helicia youngiana* var. *robusta* C.T.White is invalid as it is later than Sleumer's (1955) lectotypification and

that Sleumer should be followed. Hence Olde (2015) has assigned *Triunia robusta* to what is known as *T. erythrocarpa* Foreman and provided a new name, *T. kittredgei* Olde, for the species in SE Qld.

We have examined White's (1933) protologue and the characters he used to describe *Helicia youngiana* var. *robusta* and compared them with the specimens from locality records he cited. **Table 1** provides a list of White's characters that he used to describe *Helicia youngiana* var. *robusta* and the presence of these characters for *Simmonds s.n.* [BRI AQ317462] (lectotype selected by Foreman (1986)), the other SE Qld collections and *Kajewski 1219* (lectotype selected by Sleumer (1955)). The character list shows that Sleumer's (1955) lectotypification, *Kajewski 1219*, is in serious conflict with

Table 1. White's characters for *Helicia youngiana* var. *robusta* from his protologue and the characters of the specimens he cited.

White's protologue	<i>Simmonds s.n.</i> [AQ317462]	Other SE Qld specimens from localities cited by White	<i>Kajewski 1219</i>
Leaves entire or sometimes toothed	Leaves entire	Leaves entire or sometimes toothed	Leaves entire
Leaves to 20 cm long	Leaves 10–20 cm long	Leaves 10–20 cm long	Leaves 7–13 cm long
Leaves to 5.5 cm wide	Leaves 3.5–5.5 cm wide	Leaves 3–5.5 cm wide	Leaves 2.5–4 cm wide
Leaves very shining above	Leaves very shining above	Leaves very shining above	Leaves slightly shining above
Racemes to 10 cm long	Racemes 8–10 cm long	Racemes 8–10 cm long	Racemes 3–4.5 cm long
Pedicels to 7 mm long	Pedicels 5–6 mm long	Pedicels 6–7 mm long	Pedicels 1–3 mm long
Buds 15 mm long	Buds 14–15 mm long	Buds 14–15 mm long	Buds 6–10 mm long
Bracts to 10 mm long and 4 mm wide	Bracts 5–6 mm long and 3 mm wide	Bracts 10–11 mm long and 4 mm wide	Bracts 7–8 mm long and 3–4 mm wide
Fruits subglobose, 2.5 cm long, 2.5 cm diam.	No fruits	Fruits subglobose, 2.5 cm long, 2.5 cm diam.	No fruits

the protologue whereas Foreman's (1986) lectotypification, *Simmonds s.n.* [AQ317462], agrees with the protologue. Therefore, Sleumer's lectotypification is superseded by Foreman's (1986) lectotypification as per Article 9.19(b) of the *International Code of Nomenclature for algae, fungi and plants (Melbourne Code)* (ICN) (McNeill *et al.* 2012). *Triunia robusta* Foreman remains as the correct name to be applied to the SE Queensland species (Foreman 1986, 1995), *T. erythrocarpa* Foreman the correct name for the NE Queensland species (Foreman 1987, 1995), and *T. kittredgei* is a synonym of *T. robusta*. Note that the 'protologue' provided by Olde (2015) for *H. youngiana* var. *robusta* is not the actual protologue from White (1933), but is a short Latin description from Sleumer (1955).

Taxonomy – conspectus of *Triunia* Lour.

1. *Triunia erythrocarpa* Foreman, *Muelleria* 6: 302, fig. 3 (1987). **Type:** Queensland. COOK DISTRICT: State Forest Reserve 310, Swipers Logging Area, 8 October 1973, *B. Hyland 6919* (holo: CNS; iso: BRI, CNS, NSW).

Triunia robusta auct. non (C.T.White) Foreman; Olde, *Telopea* 18: 190 (2015).

2. *Triunia montana* (C.T.White) Foreman, *Muelleria* 6: 195 (1986); *Helicia youngiana* var. *montana* C.T.White, *Contr. Arnold Arbor.* 4: 24 (1933). **Type:** Queensland. COOK DISTRICT: Palm Camp, Bellenden Ker, 6 July 1889, *F.M. Bailey s.n.* (lectotype: BRI [AQ 317454], *vide* Foreman 1986; isolectotype: MEL *n.v.*).

Olde (2015) assumed that Sleumer (1955) lectotypified *H. youngiana* var. *montana* C.T.White by referring to a non-existent specimen at NSW 'Bellenden Ker, near the summit, White (NSW, *typus*, *haud vidi*)'. Foreman (1986) was the first to lectotypify *H. youngiana* var. *montana* by selecting as lectotype F.M. Bailey's specimen from Palm Camp, Bellenden Ker (BRI [AQ317454]). This specimen agrees with White's protologue and has on the specimen label in C.T. White's handwriting 'Type of variety'. The selection

by Foreman (1986) of this specimen as lectotype is in accordance with the Code Article 9 and Rec. 9A.3. Note that Olde (2015) reproduced Sleumer's (1955) Latin description for *H. youngiana* var. *montana* and not White's (1933) protologue.

3. *Triunia robusta* (C.T.White) Foreman, *Muelleria* 6: 196 (1986); *Helicia youngiana* var. *robusta* C.T. White, *Contr. Arnold Arbor.* 4: 23–24 (1933). **Type:** Queensland. MORETON DISTRICT: Eumundi, November 1892, *J.H. Simmonds s.n.* (lectotype: BRI [AQ317462], *vide* Foreman 1986; isolectotype: BRI [AQ317462 – 2nd sheet]).

Triunia kittredgei Olde, *Telopea* 18: 192 (2015), **syn. nov.** **Type:** Queensland. MORETON DISTRICT: Brolga Park, 6 km W of Woombye, 27 October 1990, *A.R. Bean 2538* (holo: NSW *n.v.*; iso: BRI, MEL *n.v.*).

4. *Triunia youngiana* (C.Moore & F.Muell. ex F.Muell.) L.A.S. Johnson & B.G. Briggs, *Bot. J. Linn. Soc.* 70: 175 (1975); *Helicia youngiana* C.Moore & F.Muell. ex F.Muell., *Fragm.* 4: 84 (1864); *Macadamia youngiana* (C.Moore & F.Muell. ex F.Muell.) F.Muell. in G.Bentham, *Fl. Austral.* 5: 406 (1870); *H. youngiana* var. *typica* C.T.White, *Contr. Arnold Arbor.* 4: 23 (1933), *nom. inval.* **Type:** New South Wales. Duck Creek, Richmond River, *Richards 4*, in 1863 (holo: MEL 93852A, image!, *vide* Olde 2015).

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