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NOMENCLATURAL NOTES ON *LEUCOSTEGIA YAKLAENSIS* BEDD. NOM. ILLEG. (PTERIDOPHYTA)

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ABSTRACT

Leucostegia yaklaensis Bedd. (1892) is established, under Art. 7.11 and Art. 63.1, as an illegitimate name for *Athyrium andersoni* (C. B. Clarke) Panigr. et S. K. Basu [*Asplenium andersonii* C. B. Clarke (1876)]. Typification of both the taxa is discussed and *C. B. Clarke* 27426 from Tonglo (K) is selected as the lectotype of *Asplenium andersonii* C. B. Clarke.

1. Asplenium andersoni Clarke, Journ. Linn. Soc. 15 : 154. 1876.

C. B. Clarke (1876), in describing *Asplenium andersoni* Clarke on the basis of his collections from Tonglo on 13th Sept. 1875, recognised three forms, "forma α-2-pinnate, 3-pinnatifid, frond oblong ; forma β-3-pinnate, frond broad oblong ; forma γ-4-5 pinnate, frond very large, primary pinnae very broad ovate, sori numerous, 9000-10,000 ped" and observed "Abundant. Has been distributed by me under this name". At page 118, he stated ".....I happen to have by me a kind of elaborate index with notes to my own collections of ferns (tinned down in Calcutta) which has enabled me to name the Tonglo ferns more closely and to speak of varieties more fully than in most other orders". Of the collections from Tonglo referred to above, the specimen, *C. B. Clarke* 27426 is placed in the type cover (K).

Of these three forms recognised by Clarke in *Asplenium andersoni* Clarke (1876), he (1880) included specimens referable to forma β and forma γ in *Asplenium atkinsoni* S. B. Clarke var. *andersoni* (Clarke) Clarke, when he diagnosed this variety as "Frond 9-27 in., 4-pinnate-5-pinnatifid, Pl. LVII."

Before C. B. Clarke made his collections of ferns from Tonglo, and named *C. B. Clarke* 27426 (K) as *Asplenium andersoni* C. B. Clarke (1876), he might have examined the unnamed collections of Anderson from Sikkim in CAL (*viz. Anderson* 73 and *Anderson* 1511). This is evident from Clarke's remark on the sheet, *C. B. Clarke* 9829 (K) ; "These red-stemmed species was collected by J. Anderson and placed in the Calcutta herbarium without name...." It is, therefore, legitimate to include *C. B. Clarke* 9829 (K), *Anderson* 1512 (K), both from Yakla, and *Anderson* 73 and *Anderson* 1511 from Sikkim (CAL), as also *C. B. Clarke* 27426 from Tonglo (K), as syntypes of *Asplenium andersoni* C. B. Clarke. Of these, *C. B. Clarke* 27426 from Tonglo (K) is selected here as its lectotype. It may be noted that Clarke (1880) described *Asplenium atkinsoni* var. *andersonii* (C. B. Clarke) C. B. Clarke as "4-pinnate-5-pinnatifid", but the accompanying plate 57 is of a frond which is tripinnate, 4-pinnatifid. From this, it is obvious that he included both var. β and var. γ (1876) as the two of three elements to represent var. *andersonii* Clarke.

2. Leucostegia yaklaensis Bedd. (1892)

Beddome (1892) described *Leucostegia yaklaensis* Bedd. and cited "Yakla,

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Sikkim (No. 9829, *Clarke*, under the name of *Athyrium atkinsoni* var. *andersoni*, but not the fern described as such). Yaksam (*Anderson*), 4,500 feet alt. (No. 1512)".

On an enquiry, Prof. R. E. Holttum, in his letter of 3 July 1984, writes in Kew Herbarium, Dr. Jarret (now retired) placed the following specimens, in separate type covers, as syntypes of Beddome's species : *Clarke* 9829, Yakla, originally named *Asplenium andersoni* Clarke ; *Anderson* 1512, Yaksam, distributed from Calcutta as *Davallia nodosa*.



Plate 1. *C.B. Clarke* 9829A(K) from Yakla, Sikkim, 46 Oct. 1869, labelled *Asplenium* (*Athyrium*) *andersoni* n. sp. and cited by Beddome (1892:14) as a syntype of *Leucostegia yaklaensis* Bedd. [= *Athyrium andersonii* (C. B. Clarke), *comb. nov.*].

In herb. Kew there is one other sheet of *Clarke* 9829, a small frond, evidently of the same species ; there is no other sheet of *Anderson* 1512.

Though Beddome did not write the name *Leucostegia yaklaensis* on these sheets, they were certainly in the Kew Herbarium at the time he prepared the Supplement to his Handbook and must have been seen by him.

In herb. Kew, from Beddome's own herbarium, are four other specimens labelled *Leucostegia yaklaensis* in Beddome's handwriting : *Clarke* 10214, from Yakla ; *Levinge* s.n. from Tonglo, 9,000 ft ; N. India, *Clarke* ; and Sikkim, *Clarke*. All these, agree with the two specimens in the type covers. They unquestionably belong to the genus *Athyrium*". In as much as *Leucostegia yaklaensis* Bedd. (1892) is based on two of the several syntypes of *Asplenium andersonii* C. B. Clarke (1876), the former must be rejected as an illegitimate name for the latter (Art. 7.11 and Art. 63.1, ICBN, 1983).

In reducing *Leucostegia yaklaensis* Bedd., as an illegitimate name of *Athyrium andersoni*, we must state that it is incomprehensible that Beddome believed that the specimens he named *Leucostegia yaklaensis* Bedd. were generically different from *Athyrium* Roth. These specimens have clearly three very distinct characters by which they differ sharply from the Davalloid ferns :

(a) the vascular strands in the stipe are two, each narrowly oblong in transverse section, whereas in the Davalloid ferns there are several small ones ;

(b) the upper surface of the costa of pinnae and its junction with the supporting axis, is quite different in the two groups (*see* Holttum, Ferns of Malaya, fig. 320 on page 542 vis-a-vis fig. 203 in p. 350. 1955).

(c) the indusia are narrow and are attached by their bases and sides in the

syntypes of *L. yaklaensis*, whereas, in *Araiostegia* Copel., the indusia are round and are attached by their bases only.

Athyrium andersoni (C. B. Clarke) Panigrahi et S. K. Basu, Proc. 72nd Session, Ind. Sci. Cong. Lucknow, Sect. Botany, Abst. : 14. 1985.

Asplenium andersonii C. B. Clarke, Journ. Linn. Soc. 15 : 154. 1876, p.p. excl. var. α.

Syntypes : Darjeeling to Tonglo, 9000-10000 ped. [13 Sept. 1875, *C. B. Clarke* 27426 (K)]. Sikkim, Yakla, *Clarke* 9829A (K) ; Yaksam, *Anderson* 1512 (K) ; Sikkim, 1862, *Anderson* 73, 1511 (CAL). Of these, *Clarke* 27426 K is selected here as the lectotype. *Asplenium atkinsoni* var. *andersonii* (Clarke) Clarke, Trans. Linn. Soc. London, Bot. 1 : 487, t. 57. 1880.

Leucostegia yaklaensis Bedd. Suppl. Handbook, Ferns. India, Burma, Ceylon and Malay Penins. : 13. 1892 ; nom. illeg. (Plate-1).

Syntypes : Sikkim, Yakla, *Clarke* 9829 A, (K) ; Yaksam, *Anderson* 1512 (K).

Davallia yaklaensis (Bedd.) C. Chr. Ind. Fil. : 215. 1906.

Araiostegia yaklaensis (Bedd.) Nayar et Kaur, Comp. Beddom. Handb. : 17. 1974.

Although C. Fraser-Jenkins has written the name, *Athyrium foliolosum* on both the syntype sheets of *L. yaklaensis* in herb Kew, Prof. Holttum agrees with us that *Athyrium andersonii* represents a species different from *Athyrium foliolosum* Moore (1860), as also from *Athyrium foliolosum* Bedd. (1892).

Distribution : INDIA : Himachal Pradesh, Uttar Pradesh, Sikkim (Endemic.).

Specimens examined in CAL : SIKKIM, 1862, *Anderson* 73,1511 (both labelled *Athyrium atkinsoni* var. *andersoni*) ; Sikkim, *J. D. Hooker* s.n. N. W. Himalayas : 16 Sept. 1883, *Blanford* s.n. (2 sheets) ; Hatu, 1895, *Reporter on Economic Products to Government of India* s.n. UTTAR PRADESH : Nagtiba, 2745 m, Aug. 1899, *P. W. Mackinnon* s.n.

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