ACRIULUS ONCE MORE REDUCED (CYPERACEAE)

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Ridley (1883) based the genus *Acriulus* (*Cyperaceae*) on two species, *A. madagascariensis* Ridl. from Madagascar, and *A. gregifolius* Ridl. from Angola, the former of which must be considered the nomenclatural type, as the generic characters were chiefly taken from it, and the latter species was but inadequately known at the time. The author originally admitted a close affinity of *Acriulus* to *Scleria*, but "the different habit, the solitary spikelets, and the deeply cleft style not continuous with the ovary" he regarded as sufficient to base a new genus upon, and, later on even as so important that he placed *Acriulus* in a different tribe, viz in *Cryptangieae*, not in *Sclerieae* (Ridley, 1884).

Having had the opportunity to study a fairly great number of *Acriulus* specimens, I am now convinced that neither the so-called generic characters mentioned by Ridley nor any other feature justify their exclusion from *Scleria*. The distinct articulation between style and ovary occurring in several cyperaceous genera, such as *Fimbriystylis*, *Bulbostylis*, *Eleocharis*, and *Rhynchospora*, undoubtedly furnishes a first-class character for generic delimitation. However, in *Acriulus* there is no question of the style being articulated with the ovary in this way, nor could I find any structural difference with the gynoecium in *Scleria* (fig. c and d). Deeply cleft styles are common in *Scleria*. There can hardly if at all be question of a habit peculiar to *Scleria*, a very large genus comprising annuals as well as perennials, both groups with numerous species of very diversified stature ranging from dwarfy to very stout. Therefore the alleged peculiar habit of *Acriulus* cannot be taken into account at the generic level. Besides, in *Scleria poaeformis* Retz., which may be the nearest ally of *Acriulus*, the numerous male spikelets are solitary, about evenly distributed along the branches of the panicle, and the few nut-bearing spikelets mostly restricted to the base of those branches, just like in *Acriulus*.

Ridley was apparently also struck by the presence of a scabrid appendage of the connective in his *Acriulus* species, but this is so common a phenomenon in *Scleria* and even throughout *Cyperaceae* that it need not be discussed here.

C. B. Clarke (1902) reduced *Acriulus* to *Scleria*, although keeping it as an infrageneric taxon, the systematic rank of which was not definitely indicated. All the characters brought to the fore by Ridley were omitted, and replaced by the following: "Female spikelets with no male rudiments, so that the female flower appears terminal. Hypogynous disc merely the stalk of the nut. Rather stout plants, with copious panicles."

If the female flower in the nut-bearing spikelets of *Scleria* were actually inserted laterally and always accompanied by some male flowers or at least by a vestigial male one, this in contradistinction to the single terminal female flower in *Acriulus*, there would certainly be sufficient reason for generic discrimination. As a matter of fact, however, spikelets without a trace of a male flower are found in several species of *Scleria*, and within this genus all kinds of intermediates occur between the bisexual spikelet with some male flowers and the strictly female one (Kern, 1961, p. 148). The latter type is not only to be found in Asian species, but also in African ones, for instance in the members
of sect. Ophryoscleria (Nees) C. B. Clarke; by its peculiar disk and persistent style this section is indeed far more divergent from the common Scleria type than Acriulus.

In my opinion the female Scleria flower is also terminal (Kern, 1961, p. 142), but at any rate the disappearance of the last trace of a male flower does not change the position of the female flower from lateral to terminal, neither in Scleria nor in Acriulus.

If I understand Clarke's somewhat peculiar wording correctly, he assumes the nut in Acriulus to be destitute of a disk. Now, ripe nuts have but seldom been collected. I have seen them only in Chandler 1335, Milne-Redhead & Taylor 8468, and Richards 1786, where they show a very well developed, reflexed, collar-shaped disk (fig. e, f, h). In immature fruits of the same collections the disk has strongly shrivelled in drying, and is often so tightly appressed to the stalk of the nut as to seemingly form a whole with it (fig. g, i, j), and so is the disk in all other collections I examined, including those Clarke observed and described.

In Clarke's posthumously published system of Cyperaceae (Clarke, 1908), Acriulus

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Fig. 1. Scleria greigiifolia (Ridl.) C. B. Clarke — a. Female spikelet; b. male spikelet; c. gynoecium. — Scleria poaeformis Retz. — d. Gynoecium. — Scleria greigiifolia (Ridl.) C. B. Clarke — e. Mature nut; f. id., underside; g. immature nut; h. mature nut; i. immature nut; j. id., underside. (a–b × 5, c–j × 7½; a–c and e–g from Chandler 1335, h–j from Richards 1786.)
appears as a separate genus, which of course does not mean that between 1902 and 1906 the author changed his mind concerning its systematic position. Nevertheless it seems necessary to point out the untenability of Ridley’s genus, because only De Wildeman (1906; 1916) followed Clarke. *Acriulus* is not incorporated in Nelms’s revision of the African species of *Scleria* (1955) nor in Piérart’s study on those of Belgian Congo (1953), and to my surprise it is upheld in Chermezon’s splendid elaboration of the Malagasy *Cyperaceae* (1931; 1937), again on account of the terminal position of the female flower and the absence of male flowers in the nut-bearing spikelet.

From the original descriptions it is impossible to infer on what grounds Ridley treated the Angola specimen as specifically distinct from the Madagascan plants, and Clarke could only give some trifling differences between them mainly concerning the measurements of stems and leaves.

A third ‘species’ of *Acriulus* was published in a most unfortunate way. A specimen from Belgian Congo (vallee de la Djuama, leg. Gentil, s.n.) in the Brussels Herbarium was annotated: “*Scleria Acriulus* C. B. Clarke forma *Leopoldiana?* This is close to *Acriulus* (genus) Ridley, but is very much larger than any of our examples. It might be ventured as *‘Acriulus Leopoldianus’* sp. nova? 26 Nov. 1902. C. B. Clarke.” It is to be regretted that a short note on this plant in Clarke’s unfinished manuscript was posthumously published, as if it were a well-considered description (Clarke, 1908): “*Acriulus Titan*, sp. n.; culmo 15 dm longo, crasso; nuce maturâ 2 mm longâ, ovoideâ, albâ, longirudinaliter obscure striatâ; inflorescentiâ *A. madagascariensis*. [Descr. amplior deest].” The obscure ribs Clarke mentioned may be caused by the shrinking of the quite undeveloped, still small nuts; I have found no mature nuts in the specimen.

In my opinion *Acriulus madagascariensis*, *A. gregifolius*, and *A. titan* represent but a single species, somewhat variable as to size and indumentum, and widely distributed from tropical and subtropical Africa to Madagascar.

The meaningless epithet *gregifolius* is an obvious orthographic (or typographic?) error for *gregifolius*; the latter alluding to the resemblance of the leaves to those of the bromeliaceous genus *Greigia* Regel (see K. Schumann, 1895). In the synonymy below I have accepted the corrected spelling.

I wish to express my gratitude to the Directors of the Herbaria at Kew and Brussels for the loan of the materials cited below.

**Typification:**

*Acriulus* Ridl. — Type species: *A. madagascariensis* Ridl. (lectotype).


*Acriulus madagascariensis* Ridl. — Madagascar: Baron 1870 (fide Ridl.), Hildebrand 3751.

*Acriulus titan* C. B. Clarke — Congo: Gentil s.n.

*Scleria acirius* C. B. Clarke — Based on *Acriulus madagascariensis* Ridl.

*Scleria acirius f. leopoldiana* C. B. Clarke ex De Wild. — Congo: Gillet 2818.

*Scleria fiesii* Kük. — N. Rhodesia: Fries 743 (seen by E. A. Robinson in UPS).

*Scleria greigiifolia* (Ridl.) C. B. Clarke — Based on *Acriulus greigiifolius* Ridl.


Congo. Territoire de Madimba: vallée de la Luvu, Kinkosi, prairie humide, *Compère* 1534 (BR); vallée de la Djuma, *Gillet* 2818 (BR); *Gentil* f.m. (BR); Kasai, *Achten* 654 (BR); région d'Idiofa, *Atène, Vanderijst* 3315 (BR), *Sapin* 17 (BR); moyen Kwili, région de Kikurt, Mukulu, *Vanderijst* 3171 (BR); terr. Dimbelenge, Sankuru, Musangana, savane, marais, sable gris, 600 m, *Collier* 287 (BR); région Lualaba, Malonga, marais, 1200 m, nom indig. *mulungula*, *Vin* 35 (BR); environs de Lualaba-Kraal, vasiagnage feuve, *Hombli* 923 (BR); terr. Katakoe Kombe, Katopa, prairie, tourbeux, *Gillard* 397 (BR); Kwango, Mangombo, marécage, *Callens* 3298 (BR); région d'Elizabethville, Munana, ferme Martin, commune en bordure de la rivière Munana, *Quarré* 7680 (BR); Kundelungu, prairie naturelle humide, *Schmitz* 3129 (BR); Katanga, Kansenia, près de Bwino, bord galerie forestière, près de la gare, 1550—1600 m, *Lukuesa* 100 (K); Katanga, terr. Kambove, Nord Kingombo, savane steppe à *Loudetia* et *Xyris*, 1125 m, *Shrel* 532 (BR); Katanga, Greles, plateau Bwino, vallées humides, 1600 m, *Quarré* 5909, 6123 (BR); Katanga, marais Kaimbbo, *Bredo* 5405 (BR); Ngungu, *Vanderijst* 3332, 3333 (BR).


N. Rhodesia. Mwinilunga Dist., SW of Dobeka Bridge, in boggy grassland, *Milne-Redhead* 2696 (K); Abercorn, *Bredo* 5174 (BR); Abercorn Dist., Lake Chila, in wet peaty bog, 5000 ft, *Richards* 1786 (BR, K); Abercorn Dist., Kali Dambo, in very wet marsh, 5200 ft, *Richards* 565 (BR); Shiwa Ngandu, lakeside marsh, 5000 ft, *Robinson* 1621 (K).

S. Rhodesia. Makoni Dist., ad villam Maidstone, in solo humido ad rivulum, 1450 m, *Nordlinth & Weimarck* 4106 (BR); Makoni Dist., edge of dam, 5550 ft, *Chase* 6534 (BR).

Uganda. Lake Nabugabo, alongside of boggy area, sometimes almost in water, 3750—3800 ft, *Chandler* 1335 (K).

Tanganyika Terr. Bukoba Dist., Bukoba, 3700 ft, *Haarer* 2025 (K); Songea Dist., 11 km W of Songea in Ulamboni valley, in flooded grassland on grey sand, 960 m, *Milne-Redhead & Taylor* 8468 (K); Songea Dist., Matengo, Miyao, Nyoni River, common in wet places near a stream, 1560 m, *Sensei* 2590 (BR, K).


**REFERENCES**


