

CHLOOTHAMNUS, A NEGLECTED GENUS OF BAMBUSACEAE,

by

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(Leiden).

Although the genus *Chloothamnus* was described by BUSE in the year 1854, it was not inserted in „Die natürlichen Pflanzenfamilien” by ENGLER and PRANTL, where the family of the Gramineae as worked out by Prof. E. HACKEL. Indeed, HACKEL, who had at that time no access to BUSE’s material, could only accept the facts found in the literature of the subject and therefore mentioned BUSE’s genus under *Schizostachyum*, considering it as belonging to that genus according to KURZ and having drooping spikelets. All the authors who had to do with BUSE’s genus tried to identify it only with the description given by BUSE, however, without consulting the beautiful type material of the author, preserved in the Rijksherbarium at Leiden. But even from the description, an excellent one, it is impossible to place *Chloothamnus* under the genus *Schizostachyum* as KURZ proposed. Since the new genus of BUSE is a very characteristic one with one interesting species, I wish to deal with this plant here more in detail after a careful study of the type material and the literature of the subject. For that purpose it is necessary to give BUSE’s descriptions *in extenso* to point out why so many authors had so different and wrong ideas concerning this plant. Furthermore I can give some new characters of the genus and, after reexamination of all the characters of the spikelets, explain some points of the terminology, used by BUSE. The description by this author runs as follows:

Chloothamnus. Paniculae parvae paucirameae fere omnium ramorum sunt termini. Spiculae pedicellatae lanceolatae, subquiqueflorae, floribus 4 inferioribus ad glumellam inferam redactis. Glumae adhuc distinguendae, parvae, acutae. Glumellae inferae superiora versus sensim fiunt majores, omnes coriaceae. Glumella supera tantum in flore supremo, unice absoluto. Lodiculae 3 pentagonales, marginibus conduplicatis apice longe ciliatis. Stamina 6. Stylus subnullus, stigmata 3 germiini insident lagenaeformi. Caryopsis.....

Chloothamnus chilianthus Buse. Gramen excelsum, perelegans, habitu *Chusquaeis* non absimile, at sui generis, hexandrum, tristigmaticum.

Habitat insulam *Sumatrae*, in provinciae *Angkolae superioris* sylvis, altit. 1—3000' JUNGH.

Rami mihi prostant septempedales iique forsan laterales. Sunt glabri, striati, ianes. Nodi parum crassi. Ramuli infra seni aut quini, supra minori numero, nunc fasciculatim nunc veluti verticillo undique prorumpentes, bracteis pluribus interjectis et subjectis. Folia parva, tenuia, saltem in ramis florentibus, supra glaucescentia, infra glauca, glabra, margine minute denticulata, nervo medio in inferiore tantum pagina conspicuo, nervis lateralibus primariis utrinque 3—5, transversalibus conspicuis. Vaginae more solito auriculatae, setosae, ligula abbreviata. Ramuli fere omnes panicula terminati, basi folii supremi vagina vaginati, protracta solutave vagina; panicula rarissime videtur lateralis. Rachis applanata, acutangula, brevis, ramos gerit paucos simplices vel in ramulos subternos iterum divisos. Spiculae cernuae, secundae, 6—24 ad plurimum in panicula, plerumque simplices, sed et aliquando gemmula minuta basi auctae occurrunt, normaliter absolutae, sed etiam more *Bambusacearum* solenni magis minusve evolutae. Glumae glabrae, acutae, carinatae, infera brevior. Glumellae inferae glabrae, nervis prominulis; glumella supera, quae tantum florem absolvit unicum superiorum, margine involuta, apice pilosa, nervis vix prominentibus.

From this description we see that BUSE's plant cannot belong to the genus *Schizostachyum* on account of the utterly different inflorescence which has, as BUSE correctly indicated, the habit of that of the genus *Chusquea*, the latter, however, being confined to South America. Important are the lodicules in BUSE's species, which are wanting in the genus *Schizostachyum*. By studying the spikelets of BUSE's type we learn somewhat more about his concept of the organisation of the spikelets. These spikelets have two lower short scales, representing the two glumes as generally found in the grasses; BUSE too calls them glumae. The next scales, gradually becoming larger, are also sterile, having no trace of flowers in their axils, in reality there are 4 of such scales in nearly all the spikelets I examined. BUSE gives 4 of such glumellae but mentions the spikelets as „subquinqueflorae”. If we carefully remove the sterile scales, we have a rachis with the only flower of the spikelet at the top, under a high power we see that the continuation of the rachis is not extant, laterally we see at the end of the rachis

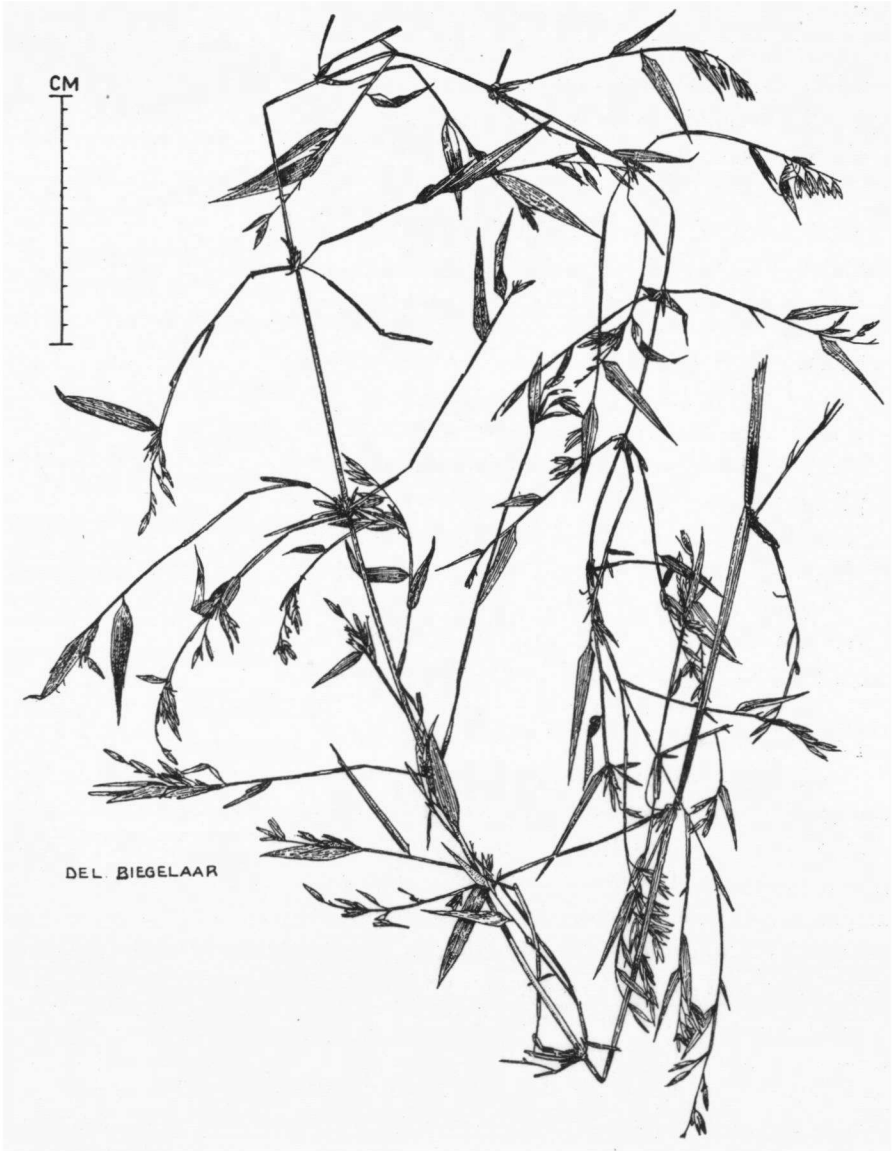
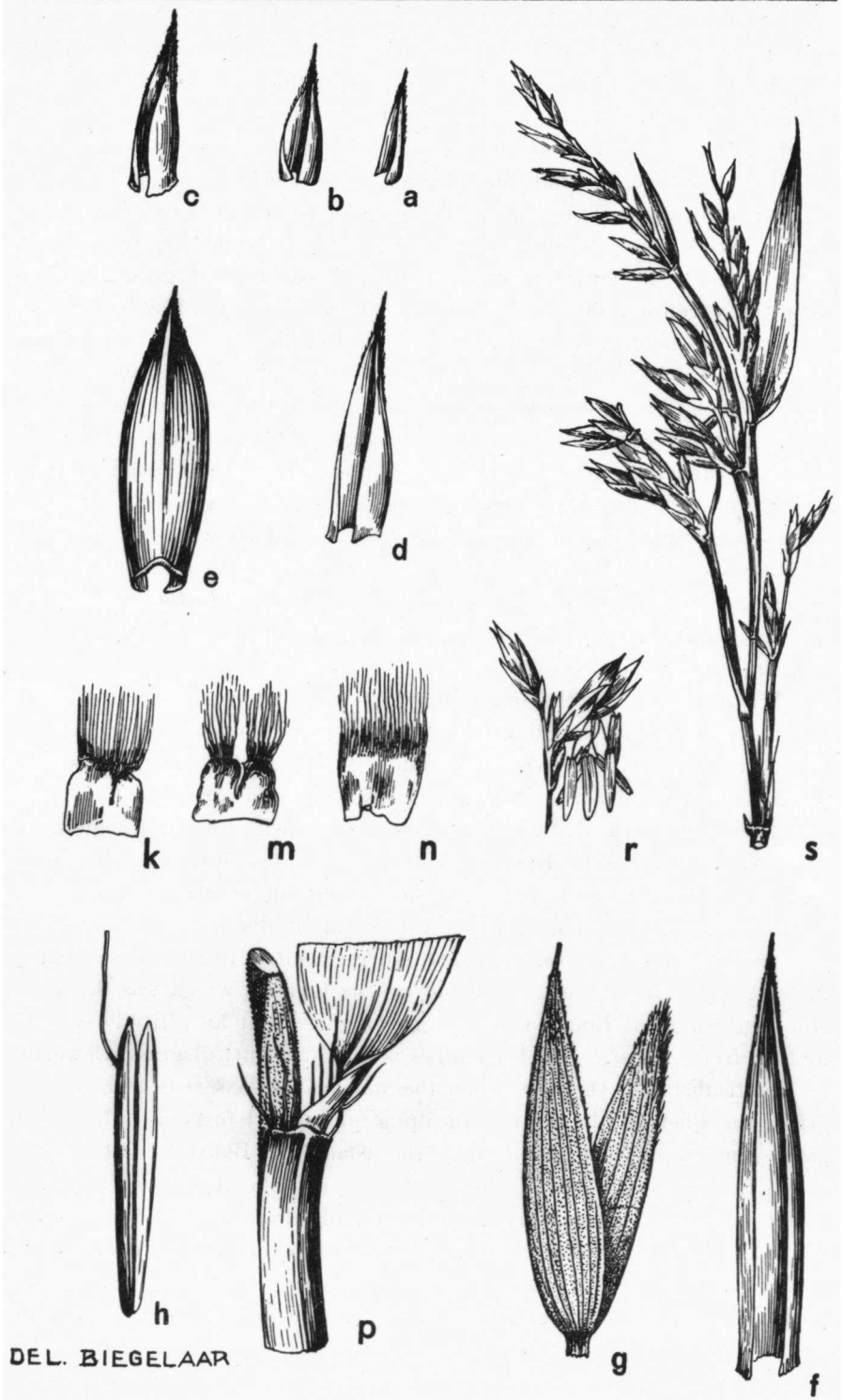


Fig. 1 — *Chloothamnus chiklanthus* BUSE — From type specimen.

only a very minute conical elevation which is often scarcely visible. This is a very important character because in the genus *Schizostachyum* there is a rather long and very distinct prolongation of the rhachis which not rarely bears a small rudiment of a glume. Another important point of difference is that the spikelet of *Schizostachyum* is in reality a small inflorescence, the rhachis being branched from the sterile scales; such spikelets are therefore indicated as pseudo-spikelets, whereas in *Chloothamnus* the spikelets do not differ from typical grass-spikelets, with the exception of the lower scales which bear no flowers. If we now look at the flower at the top of the rhachis, we find that it consists of a fertile lemma having the aspect of the sterile ones and a palea; the latter is slightly shorter than its fertile lemma and differs from the common palea as found in grasses in being of quite the same form and structure as the fertile lemma and in being not provided with two keels. In *Schizostachyum* the palea is keeled and sulcate, and the sulcus is occupied by the slender prolongation of the rhachis. All the characters enumerated above are so different from those of the genus *Schizostachyum* that it is evident that BUSE's genus *Chloothamnus* cannot be united with the genus *Schizostachyum*. I suppose, this question is now definitively settled.

We now come to the question: what have later authors done with BUSE's genus? First of all we go to Colonel MUNRO's monograph of the *Bambusaceae* from the year 1866 and find there that he too did not see the plant of BUSE. Under the genus *Nastus* he gives as the distribution also Sumatra with a ? and says further on: „I am not acquainted „with *Chloothamnus* of BUSE, except from the description of the genus „given by MIQUEL, and, with the sole exception of no mention being „made of the terminal barren pedicel, I cannot discover any difference „between it and *Nastus*.” MUNRO further cites JUNGHUEN's locality under the distribution of *Nastus borbonicus* GMELIN, which was described from the island of Bourbon and is growing there at an altitude of 3000 to 4000 feet. „This *Nastus borbonicus* is a most beautiful grass, flowering „in September and October, when the stamens are exerted and hanging „from the spiculae. It is quite an alpine plant, and forms a well-marked „and remarkable belt all around the island of Bourbon, interrupted „only in places where the flow of lava prevents vegetation.” (p. 75). MUNRO remarked that it is very interesting that a plant which was supposed to be confined to a very considerable elevation (3000—4000 feet above the sea) in Bourbon, should also be found in Sumatra, probably in a similar volcanic district (but at lower altitudes). Now



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I saw and studied authentic material of this *Nastus borbonicus* and it is very striking to see how much it resembles the *Chloothamnus* of Sumatra in habit, having the same whorled floriferous branches, with the subsecund drooping spikelets which have the same form as those of BUSE's plant. *Nastus borbonicus*, however, differs distinctly in the hairy sheaths and glumes and especially in the palea of the flower which is sulcate with two keels and a prolongation of the rhachis which is placed exactly in the sulcus. MUNRO's identification is better to understand than KURZ's one and proves that the carefully studied BUSE's description. On account, however, of the prolonged rhachis and the sulcate, two-keeled palea of the genus *Nastus* we cannot unite *Chloothamnus* with *Nastus* although the two genera at first sight seem to be the same. We have here once more a striking convergency which is known in different other families, e. g. *Evolvulus* and *Jacquemontia* in the *Convolvulaceae*.

Colonel MUNRO described in his monograph also *Melocanna gracilis* KURZ, a name taken from a manuscript note, the type being WALLICH no. 5032. From the authentic description it is clear that this plant does not belong to the genus *Chloothamnus* because the palea is two-keeled and sulcate.

In the year 1870 S. KURZ, the curator of the Calcutta Herbarium, wrote an article on some new or imperfectly known Indian plants in the Journal of the Asiatic Society of Bengal. Here different bamboos are dealt with and we find there under no. 95 (p. 88) his opinion, that *Melocanna gracilis* KURZ, apud MUNRO, is *Schizostachyum chilanthum*, (*Chloothamnus chilanthus* BUSE). The difference between *Melocanna* and *Schizostachyum* rests entirely in the fruit, and not in the absence of the upper palea, as suggested by Col. MUNRO.

This identification, although being wrong, as we know at present, by such an authority as KURZ was accepted in the Index Kewensis and since that time the genus of BUSE was lost. Unfortunately the misidentification of KURZ, was not discovered by J. S. GAMBLE when he published his great work on the Bambuseae of British India in the Annals of the Royal Botanic Garden, Calcutta in 1896. Here the name *Schizostachyum chilanthum* KURZ was accepted for a plant which was

Fig. 2 — *Chloothamnus chilanthus* BUSE — *a*, *b*, *c*, glume I, II and III (× 6); *d* gl. IV (× 5); *e* gl. V (× 4); *f* gl. VI (× 5); *g* flower with fertile lemma and palea (× 5); *h* stamen (× 6); *k*, *m*, *n*, lodicules (× 6); *p* sheath with portion of the blade (× 3); *r* group of spikelets, one of them with exerted stamens (about nat. size); *s* flowering branch (× 1) — From type specimen.

figured on plate no. 101 from a specimen, collected at Batang, Malacca, by VAUGHAN STEVENS (no. 3947). A glance at the plate and a study of the description proves that GAMBLE described a plant which is very different from the true *Chloothamnus* of BUSE. GAMBLE says: „I have „followed KURZ in identifying his *Melocanna gracilis* with *Chloothamnus* „*chilianthus*, BUSE, although BUSE's description does not agree in all „particulars. (See also note in BENTH. and HOOKER FIL. Genera Planta- „rum, p. 1214.)”

Another important publication was given by BUSE himself three years after the publication of his new genus. He studied the grasses collected by Prof. REINWARDT and found among them a bamboo named by REINWARDT as *Bambusa tenuis* in his herbarium. He recognized this bamboo as belonging to his genus *Chloothamnus* and described it as a variety *subscraba* of his *Chloothamnus chilianthus* in *Plantae Indiae Batavae Orientalis*, published by Prof. DE VRIESE in the year 1857. In this publication we find on p. 114 under the tribus *Bambusacea* the following notes by BUSE:

Chloothamnus chilianthus Buse var. *subscraba* Buse: spiculis erectis, glumis glumellis subscabris.

Hab. Collegit in Java, sub nomine *Bambusae tenuis*, Rwdt. Speciem ipsam in Sumatra Jungh.11.

It is important to give here further BUSE's opinion on this plant, saying:

Unum tantum in herb. specimen idque tamen absque dubio non nisi varietatis titulo a speciminibus Junghuhnianis discrepans. Glabrities enim aut scabrities in Bambusaceis non magni momenti est; pendetque saepius a vegeta aut laxiore speciminis indole, quam ob causam et spicularum directio, quod nempe sint erectae aut cernuae, variat; simile quid praebent *Bromi* nonnullae species.

Now the type of this variety was preserved in BUSE's own herbarium, which after BUSE's death was presented by the heirs to the Rijks-herbarium. This specimen I carefully studied. Unfortunately it is not in a good condition. It consists of a branch, about 40 cm long, with whorled flowering-branches; most of the spikelets are fallen off, the spikelets so far as present are more or less damaged and only one flowering-branch bears a part of a leaf. The sheet bears in ink a label by REINWARDT with the name in his handwriting as *Bambusa verticillata*, the name *verticillata* deleted and replaced by the name *tenuis*. There is another label reading „arborea inermis” and something illegible in lead pencil. There is, moreover, BUSE's label in his hand with the data

as given in his description. On this authentic specimen, I studied the characters of the spikelets and I compared them with those of the type of *Chloothamnus chilianthus*. Quite as in the true *Chloothamnus*, there are two small lower glumes followed by four longer sterile glumes, gradually becoming longer, there is a very minute prolongation of the rhachis and but one flower, consisting of a fertile lemma and a palea of the same form and texture, there are six free stamens and 3 longiciliate lodicules and the stigmas are feathery. In this organisation there are no differences between the plants from Sumatra and Java. The javanese specimen has spikelets in which the various glumes are somewhat longer but their length in the Sumatra plant is variable too. In the javanese specimen the spikelets seem to be erect, in reality they are subsecund and BUSE himself did not attach much importance to this character. As to the indumentum of the spikelets I must remark that the true *Chloothamnus* from Sumatra has not rarely a fertile lemma which is scabrous.

From all the data we now have at the moment from the two types it is obvious that the variety *subscabra* is scarcely to maintain so that the genus *Chloothamnus* occurs not only in Sumatra but also in Java. The dimensions of the spikelets of the species are in general: gl. I $2\frac{1}{2}$ —3 mm, gl. II $3\frac{1}{2}$ —5 mm, gl. III $4\frac{1}{2}$ —5 mm, gl. IV about $7\frac{1}{2}$ mm, gl. V about 10 mm, gl. VI about 12 mm, fertile lemma about 12 mm, palea at least $10\frac{1}{2}$ mm, or in the javanese plant up to 11 mm long. In the type of the javanese plant the lemma is always much damaged, the tip broken off and the awn therefore never extant. The exact locality where REINWARDT collected his bamboo is unfortunately not known. I have no doubt that this locality is situated in Java indeed and I presumed that the same species was also represented in JUNGHUHN'S collection. As the latter, however, does not contain but sterile specimens, BUSE failed to recognize it. Accordingly, I went over the sterile specimens of bamboos in BUSE'S collection. We know that BUSE in the year 1854 under the grasses, at the end of the family, gave an „Addenda ad Bambusaceas”, where he treated the „stirpes steriles”.

We find there 7 sterile bamboos, all collected by JUNGHUHN. It was especially the 7th species that called my attention. BUSE gives the following characters:

ramis praelongis; ramulis verticillatis, flexuosis, plurimis; foliis parvis, lanceolatis, basi attenuatis, petiolo longiusculo suffultis, utraque pagina laevibus, margine asperulis, tenue membranaceis, nervis non valde conspicuis.

Habitat *Javae* sylvas intactas prope *Pekalongan*, altit. 3—6000'. JUNGH. Incolae hanc vocant *Bambu oö*, fide JUNGH. — Species propria, scandens aut ramis pendentibus?

This plant is represented at the Rijksherbarium, with the label in BUSE's hand (H. L. B. no. 909, 65—112). There is another sheet with a label, probably written by JUNGHUHN himself and reading: „143 bambu ö ö Bosschen van Pegalongang¹⁾ 4300' Preanger". (H. L. B. no. 909, 65—36).

These sterile plants (branches), especially the first-named one, have, in their verticillate arrangement, the same habit as the flowering-branches of BUSE's *Chloothamnus* and the younger leaves are not different from those of the fertile shoots of BUSE's species; petioles, auricles and ciliae agree also.

The genus *Chloothamnus* is now better established and very distinct from all the other genera known at that time. It belongs to the *Eubambusea* and is to place near *Bambusa* on account of the free stamens but it is quite distinct in the not two- but one-keeled palea. As to the palea the genus *Chloothamnus* comes nearer to the genus *Oxytenanthera* where the palea is also but one-keeled, the latter has, however, many other differences and is at once to exclude by the monadelphous stamens and the conical, narrow spikelets. In the type of the genus *Chloothamnus* the sterile scales of the spikelets are acute if seen laterally, expanded they are rounded at the top and bearing a distinct mucro or short awn. These scales are many-nerved, the number of the nerves being 9—13. The spikelets, seen *in toto*, are somewhat flattened on account of the keeled glumes, the latter are nearly smooth, whereas the fertile glume (lemma) and the palea are, under a high power, very distinctly punctulate and have moreover below the tips, a characteristic adpressed indument, consisting of straight very stiff rather thick hairs. The leaves in this genus are tessellate by transverse veinlets, very distinct when dry.

MIQUEL, KURZ and HASSKARL were acquainted with this interesting bamboo; having only sterile specimens, they did not recognize the species, because they failed to look for the plant from Sumatra. In my opinion, HASSKARL described the same plant under the name of *Bambusa elegantissima* in the year 1848 whereas KURZ placed this plant of HASSKARL under other genera such as *Beesha*, *Melocanna* and *Schizostachyum*, opinions which are altogether incorrect.

The incertitude whether the javanese bamboo, treated here, repre-

¹⁾ = Pengalengan.

sented a distinct genus or a member of an already described one, was at once removed when the javanese bamboo was found in flower. This occurred, according to the labels of the specimens, kindly put at my disposal by the Herbarium at Buitenzorg, in the year 1903 or 1904. The very beautiful material, which is now represented in all the larger herbaria of the world, was collected by BOSSCHA near Malabar in Priangan (the type locality of *Bambusa elegantissima* of HASSKARL, as is evident from his description in the year 1848, where he cited his species as growing „In sylvis 4000 ped. elatis inter montes Tilu et Malabar provinciae Bandong in terra Preangereana copiosissime obviam venit; nom. sund.: A'wi ülül.”)

These specimens from BOSSCHA were studied by VALETON and determined by him as *Schizostachyum elegantissimum* KURZ in the year 1905, a combination which is based upon HASSKARL's *Bambusa*, mentioned above. The exact locality of JUNGHUHN's plant is according to his label, in the Preanger at 4300 feet near Pengalengan (written by JUNGHUHN as Pegalongang). BOSSCHA's specimens belong to the genus *Chloothamnus*. The identification of VALETON was quite correct, but unfortunately he followed KURZ and placed the species in the wrong genus. Now the question was definitively settled when Prof. PULLE found the species in flower in the year 1906 near the high plateau of Pengalengan at 1600 m altitude near Malabar too. These flowering specimens had reduced leaves only, they agree perfectly with BOSSCHA's plants. It was KOORDERS who communicated a specimen of Prof. PULLE's no. 3173 to J. S. GAMBLE, the monographer of the Indian *Bambusaceae*, who recognized the plant as belonging to a new genus named by him *Oreioslachys* with the species *O. Pullei* GAMBLE. A publication of this genus appeared in *Verhand. Kon. Acad. v. Wetenschappen* at Amsterdam Deel XVI, ii, p. 657 in the year 1908. This description was prepared from the flowering specimen of PULLE and from the sterile specimen of JUNGHUHN no. 143.

This new genus with one species agrees as to the description and the type specimen perfectly with all the other specimens hitherto found in Java and belongs at the same time to the genus *Chloothamnus* of BUSE. KOORDERS gives in his article much information about the genus *Oreioslachys*, noting that it is more related to the genus *Sasa*, which was published by MAKINO and SHIBATA in the year 1901, a genus having 6 stamens with free filaments and 3 plumose stigmas, the leaves being finely tessellate. In *Sasa*, however, there is a distinctly bicarinate palea, moreover all the flowers of the spikelet are perfect with an imperfect

terminal one. *Sasa* is a Japanese genus of shrubby bamboos. KOORDERS gives much other information as to the geographical distribution, but the genus is as we know at present not endemic in Java; it occurs not only in Sumatra but also in New Guinea. Having found the identity of the genera *Chloothamnus* and *Oreiostrachys* we have to accept for the Japanese plant the name *Chloothamnus elegantissimus* (HASSK.) HENR. nov. comb. I have to add here that VALETON, according to determinations given by him in the Herbarium at Buitenzorg, gave to the plant the name of *Oreiostrachys elegantissimus* (HASSK.) VAL. a name also accepted by BACKER in his Handb. Fl. Java (1928) p. 288.

In an additional paper by KOORDERS in Verh. Kon. Acad. Amsterdam, Deel XVII (1909) p. 127 on *Oreiostrachys* we find some more data as to the fruit of the genus. I have in vain tried to find mature fruits in the rich material I had at my disposal, material kindly received for study from Kew and Buitenzorg. In our herbarium there is on the sheet of the specimen collected by BOSSCHA an envelope with fruits, as indicated in VALETON's hand, in reality these are no fruits but much swollen spikelets, infected by a gall, which is not rarely observed on the plant. Fine cigargalls were also found on the specimens which SCHEFFER already collected in the year 1871.

There is one point more I wish to memorate; GAMBLE, who recognized the genus, accepted the name *Bambusa elegantissima* HASSK. as a nomen nudum. Although HASSKARL's Latin description is short and taken only from sterile material, the exactly given type locality points to no other bamboo and his name has therefore priority even over BUSE's name *chilianthum*. As to the identity of the plant from Java and that from Sumatra I must remark that only the Japanese species is fully known in its vegetative and flowering parts. Unfortunately, the plant from Sumatra, although represented in very beautiful flowering material, is not known with the normal leaves in the vegetative state and there are, moreover, some slight differences, the bamboo from Sumatra being a more graceful and elegant plant and the short pubescence of the leaves just above the petiole on the lower surface, so distinct in the Japanese plant, is scarcely visible in the bamboo from Sumatra. In the spikelet-characters there are, as is already pointed out, no specific differences.

For the moment I did not place BUSE's material in the Rijks-herbarium under *Chloothamnus elegantissimus*; it seems to me that it is better to wait until the bamboo from Sumatra is fully known in its vegetative parts. The Kew Index accepts *Oreiostrachys* as feminine and gives the specific name as *elegantissima*.

In modern time different other bamboos were described and placed in the genus *Oreiostrachys*. Of course, if they indeed belong to that genus, they ought to be transferred to the genus *Chloothamnus*. I hope to give more information about this subject afterwards and place here another species under the genus *Chloothamnus*.

Chloothamnus Schlechteri (PILGER) HENR. nov. comb. = *Oreiostrachys Schlechteri* PILGER in Engler, Bot. Jahrb. Band 52 (1914) p. 174.

The very good description points exactly to the genus *Oreiostrachys* as already observed by PILGER in a note. This species is very characteristic by the long-awned glumes of the spikelets.

Oreiostrachys producta PILGER in ENGLER, Bot. Jahrb. Band 62 (1929) p. 460 is a very aberrant species; it has a prolongation of the rhachis with a rudiment at the summit, this prolongation is about 7 mm long and the palea is two-keeled, the prolongation being imbedded in the sulcus. PILGER noted already these facts but accepted his new species as allied to *O. Pullei* and *O. Schlechteri*. The species is however insufficiently known and PILGER thinks that this plant may be a small bamboo. For the moment I therefore hesitate to place *Oreiostrachys producta* under the genus *Chloothamnus*.

Oreiostrachys ciliata (CAMUS) NAKAI in Journal Arnold Arboretum. VI. (1925) p. 152 = *Arundinaria ciliata* CAMUS in Bull. Mus. Nat. Hist. Paris XXV (1919) p. 672.

NAKAI's description of the genus is different from the original one and does not agree with the type of the genus. He mentions only a few characters, two styles having no plumose stigmas, the obtuse glumes do not agree with the true *Oreiostrachys*. The name was based upon a bamboo from Cambodja, collected by PIERRE. From the description given by Miss CAMUS it is, in my opinion, evident that this species is not an *Oreiostrachys* at all. The very long, many-flowered spikelets and the implicate ciliolate keels of the palea demonstrate this. *Arundinaria ciliata* is moreover a not climbing bamboo.

The localities (Priangan, W. Java) of the *Chloothamnus elegantissimus* specimens are extensively cited in the Excursionsflora von Java by KOORDERS. I have to add here the following:

W. J a v a: Priangan Regencius: Bandoeng; Tjibeureum, leg. J. J. Smith no. 636, 20 IX 1911, sterile, 1600 m (Herb. Buitenzorg) — G. Goentoer, ravine of the Tjiboenilarang near Kamodjais, leg. B. H. Danser no. 6744, 30 V 1928, flowering, circa 1400 m (Herb. Buitenzorg, Herb. Leiden).

In the present paper I have given the name of the author of the

genus *Chloothamnus* as BUSE. In the first article of BUSE the name was published by MIQUEL as *Büse* with the new species of that author, but his article on the Gramineae was followed by the words: „exposuit L. H. Buse”. The author himself always wrote his name and signed his labels in his herbarium as *Buse*. Afterwards when he wrote a second paper on grasses, published by DE VRIESE in 1856, his name was constantly, throughout the whole paper, given as *Buse*. The spellings *Büse* or *Buese* found in the literature are therefore wrong.

My sincere thanks are due to the curators of the herbaria at *Buitenzorg* and at *Kew* for the kindness, with which they have put the material of this genus at our disposal.

Summary.

Chloothamnus BUSE ap. MIQUEL, Pl. Jungh. 1854, 386 — *Oreio-stachys* GAMBLE ap. KOORDERS, Verh. Kon. Ak. Wet. 16, 1908, 657..

Hab.: Malay Archipelago.

1. *C. chilianthus* BUSE, l. c., type species of the genus — *Schizostachyum chilianthum* (BUSE) KURZ, Journ. As. Soc. Beng. 39, ii, 1870, 88 — non *Melocanna gracilis* KURZ ap. MUNRO, Transact. Linn. Soc. 26, 1866, nec *Schizostachyum chilianthum* in GAMBLE, Ann. Roy. Bot. Gard. Calc. 7, 1896, 116, pl. 101.

Hab.: Sumatra (Angkola 300—900 m).

2. *C. elegantissimus* (HASSK.) HENR., nov. comb. — *Bambusa elegantissima* HASSK., Pl. jav. rar. 1848, 42 — *Beesha elegantissima* (HASSK.) KURZ ap. MUNRO, l. c. 1866 — *Schizostachyum elegantissimum* (HASSK.) KURZ, l. c. 1870, 90.

Hab.: W. Java (Preanger, 1500—1600 m).

Remark: Possibly identic with the preceding species.

3. *C. Schlechteri* (PILG.) HENR., nov. comb. — *Oreio-stachys Schlechteri* PILG., Engl. Bot. Jahrb. 52, 1914, 74.

Hab.: N.E. New Guinea (Dischore, 1300 m).

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1857 — BUSE, L. H., ap. de Vriese: *Plantae Indiae Batavae Orientalis*, fas. II, p. 114.
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