

ADDITIONS TO THE GENUS ACORIDIUM

by

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The genus *Acoridium* is characterized by an extraordinary history. The original species, *A. tenellum*, a native of the Philippine Islands, was described at length from a fruiting specimen in 1843 by NEES VON ESENBECK and referred to the *Philydraceae*. This treatment was prompted by the aspect of the plant, its vegetative structure and the mature seed-capsule adnate on the upper part of the elongated, sedge-like leaf. In 1843, ENDLICHER (Mant. Gen. Pl. Suppl. 3: 59) transferred the genus from the *Philydraceae* to the doubtful genera of the *Burmanniaceae*. Until 1879, *Acoridium* remained a puzzling and inadequately understood concept, and then BOECKLER [Flora 62 (1879) 158] placed it in the *Cyperaceae*, assigning to it a position between *Scirpus* and *Eleocharis*, depending entirely for his interpretation on the fruiting type preserved in the Berlin Herbarium¹). In 1880, BENTHAM and HOOKER referred *Acoridium* to the genera *dubia* vel *exclusa* at the end of their treatment of the *Cyperaceae* in their "Genera Plantarum" (3: 1043). This was the situation toward the close of the nineteenth century when Mr C. B. CLARK of the Kew Herbarium, after a careful study of the type specimen, concluded that it was not a member of the *Cyperaceae*. With the hope that its identity might be established, he submitted the type specimen to Mr R. ALLEN ROLFE who was engaged in critical research among Philippine plants. Fortunately ROLFE was a keen orchidologist. He recognized the plant as being equivalent to a doubtful Philippine orchid which had been erroneously referred to *Ceratostylis gracilis* BL. by ANDRÉS NAVES (in BLANCO, Fl. Filip. ed. 3, Nov. App. 245).

¹) In this regard, it is interesting to discover that in the year preceding BOECKLER's discussion of *Acoridium* (in Otia Bot. Hamb. 54), H. G. REICHENBACH in complete ignorance of *Acoridium tenellum* had described under the name *Dendrochilum junceum* a Philippine orchid conspecific with it, collected by WALLIS.

However, ROLFE was unable to establish the identity of the doubtful species, because for this purpose flowerless specimens were quite inadequate. At about this time botanical exploration of the Philippines was progressing rapidly as a result of the American occupation of the Islands following the Spanish War of 1898, and A. LOHER, a man with a deep interest in orchids, submitted to ROLFE, among other specimens, flowering plants that were clearly referable to *Acoridium tenellum*. Then it became clear that *Acoridium* was congeneric with *Platyclinis*, an orchid genus of long standing and of some horticultural prominence. But as *Acoridium* antedated *Platyclinis*, ROLFE accepted it and renamed some thirty-two species of *Platyclinis* [Orch. Rev. 12 (1904) 219], and overnight as it were, from obscurity and uncertain rank *Acoridium* became a living concept, properly placed in the *Orchidaceae*.

Almost simultaneously with ROLFE's nomenclatorial revision in 1904, J. J. SMITH, the eminent orchidologist of Buitenzorg, with characteristic thoroughness, published his monographic studies of *Platyclinis* and *Dendrochilum* (Uebersicht der Gattung Dendrochilum Bl., in 'Recueil des Travaux bot. Néerl.), merging these genera and reducing *Platyclinis* to synonymy. As *Dendrochilum* had been established by BLUME in 1825, ROLFE's new combinations under *Acoridium* passed into synonymy. Beginning in 1904 (the year in which ROLFE reduced *Platyclinis* and J. J. SMITH monographed *Dendrochilum*), my interest in the question was being constantly stimulated by a steady stream of Philippine species which were coming in for identification from the Bureau of Science at Manila. In 1908, I published a complete treatment of the Philippine species of *Dendrochilum* known up to that time and gave my reasons for adopting the view that *Acoridium* and *Platyclinis* should be recognized as generic sections. But in restudying the whole matter thirteen years later, with an abundance of material to guide my conclusions, I reestablished *Acoridium* as a valid genus, assigning to it those species which had been set apart as a section under *Dendrochilum* with *Acoridium tenellum* as the sectional type.

Acoridium is endemic to the Philippines where the centre of distribution is in Luzon. Many of the species are restricted to the northern parts of Luzon and exhibit a tendency to become localized and frequently are confined to particular mountains.

Recently in working on a large collection of orchids from Rizal Province in Luzon, a collection assembled by A. LOHER in 1909, I recognized nine new species of *Acoridium*, several of them of outstanding importance because they emphasize the tendency of *Acoridium* species

to become strictly localized and indicate interesting evolutionary trends. These species are described below. In addition, I have included a tenth species collected by RAMOS and EDAÑO in Rizal Province and I have made two nomenclatorial changes. With these additions and changes, the genus *Acoridium* is found to comprise fifty-seven species, an increase of fifty-four species since 1904 and is also found, in the number of species assigned to it, to exceed *Dendrochilum* as that genus was understood when J. J. SMITH published his monograph in 1904.

To my colleague Dr LOUIS O. WILLIAMS I am indebted for helpful coöperation in the critical study of the material on which my conclusions rest.

1. *Acoridium abortum* AMES, spec. nov.

Herba epiphytica. Radices fibrosae. Pseudobulbi graciles, linearicylindracei, corrugati, unifoliati. Folium lineare. Pedunculus filiformis, adscendens vel nutans, usque ad racemum nudus. Bracteae racemi glumaceae, ovatae. Sepala lateralialia late lanceolata, acuta vel acuminata. Sepalum dorsale simile. Petala ovato-lanceolata, acuta. Labellum trilobatum; lobi laterales falciformes, obtusi, prope basim lobi utriusque callo papilloso crescentiformi instructi; lobus medius trilobatus vel lobus medius fere deficit. Columna generis.

A caespitose epiphyte with fibrous roots, up to 2 dm. tall. Pseudobulbs linear-cylindric, wrinkled, unifoliolate. Leaves linear, conduplicate at the apex, acuminate, 7—13 cm. long, 2—3 mm. broad, 3-nerved, the lateral nerves often obscure, not on the margin. Peduncles filiform, ascending or nodding, up to 10 cm. long. Bracts of the inflorescence ovate, glume-like, about 2.5 mm. long. Lateral sepals broadly lanceolate, acute or acuminate, about 2 mm. long and 1 mm. broad. Dorsal sepal similar. Petals ovate-lanceolate, acute, up to about 1.5 mm. long, about 1 mm. broad. Lip 3-lobed (or sometimes apparently only 2-lobed), near the sinuses of the lobes is a crescent-shaped papillose callus; lateral lobes falciform, obtuse, about 0.75 mm. long; mid-lobe trilobulate or nearly lacking.

Luzon: Province of Rizal¹). September 1909. LOHER 14690; September 1909. LOHER 14694 (*type* in Herb. AMES No. 43704).

The species here proposed is based on excellent and copious material.

¹) Unfortunately neither of the specimens are exactly localized. According to Prof E. D. MERRILL, however, LOHER collected in eastern Rizal and adjacent Tayabas and the specimen may have originated in either province.

The most striking differentiating character is the very poorly developed mid-lobe of the lip. The mid-lobe may be almost lacking and represented only by a thickening in the tissue where it should arise. The very apparent alliance of this species to *A. mindanaense* AMES, endemic to Mindanao, is interesting when the distribution of other species of the genus is taken into account.

2. *Acoridium anfractum* AMES var. *anfractoides* (AMES) AMES, comb. nov.

Dendrochilum anfractoides AMES, Orch. 3 (1908) 13, t. 28 — in Philipp. Journ. Sci. 4 (1909) 665.

Acoridium anfractoides AMES, Orch. 7 (1922) 80.

3. *Acoridium angustifolium* AMES, spec. nov.

Pseudobulbi lineari-cylindracei, corrugati, unifoliati. Folia linearia, acuta. Pedunculus filiformis, quam folium brevior. Sepala lateralia lanceolata, acuta. Sepalum dorsale simile. Petala ovato-lanceolata, margine integra vel paulo erosa. Labellum trilobulatum; lobi laterales late crescentiformes; lobus medius quadrangularis, breviter apiculatus. Columna generis.

A tufted grass-like epiphyte. Pseudobulbs linear-cylindric, stem-like, much wrinkled at maturity, 2—3 cm. long, in younger specimens covered by closely appressed sheaths which, in age, disintegrate. Leaves linear, flat above, prominently nerved and canaliculate, narrowed into a petiole toward the base, acute or acutish, 15—25 cm. long, 2—3 mm. broad. Peduncles filiform, shorter than the subtending leaf, very lightly adherent to the surface of the leaf or apparently free. Inflorescence a distichous raceme, 3—6 cm. long, interval between the alternate flowers 1—2 mm. Lateral sepals lanceolate, 3-nerved, acute, about 2.5 mm. long. Dorsal sepal similar in size and shape. Petals ovate-lanceolate, 3-nerved, about 2 mm. long and 1.5 mm. broad, margins entire or slightly erose. Lip 3-lobed, a callus opposite each sinus and one on the disc; lateral lobes broadly crescent-shaped, about 1 mm. long; mid-lobe quadrangular, short-apiculate, about 0.5 mm. long, subequal to the lateral divisions. Column about 0.5 mm. long.

Luzon: Province of Rizal. September 1909. LOHER 14721 (*type* in Herb. AMES No. 43706. *Duplicate type* in Herb. Bur. Sci., Manila); September 1909. LOHER 14637a.

Acoridium angustifolium is most closely allied to *A. graminifolium* AMES, from which it is strikingly different in the details of its floral

morphology. The plant is much smaller in size generally than is *A. graminifolium*.

4. *Acoridium apiculatum* AMES, spec. nov.

Herba epiphytica. Pseudobulbi anguste fusiformes, corrugati, unifoliati. Folium oblongo-lanceolatum, obtusum. Pedunculus subfiliformis, adscendens vel nutans, usque ad racemum nudus. Bracteae racemi oblongo-ovatae. Sepala lateralia lanceolata, acuta. Sepalum dorsale simile. Petala lanceolata vel oblanceolata, acuta, fimbriata. Labellum trilobatum; lobus medius subquadratus, retusus, erosus, cum apicula lineari-lanceolata. Columna generis.

An epiphytic caespitose herb up to 20 cm. tall. Leaves oblong-lanceolate, obtuse, 6–9 cm. long, 1–1.7 cm. broad, with five prominent nerves, the lateral ones not on the margin. Inflorescence surpassing the subtending leaf, 6–8 cm. long. Bracts of the inflorescence 3.5–5 mm. long. Lateral sepals lanceolate, acute, about 6 mm. long and 2 mm. broad, more or less coherent along the inner margins. Petals lanceolate or oblanceolate, acute, margins fimbriate, about 5 mm. long and 2 mm. broad. Lip 3-parted, about 3 mm. long, 2.7 mm. broad, bearing two calli opposite the sinuses and a median keel; lateral lobes falcate, obtuse; mid-lobe subquadrate, somewhat shorter than the lateral lobes, strongly retuse with a long lanceolate apicule which extends beyond the erose truncate mid-lobe.

Luzon: Province of Rizal. January 1913. LOHER s.n. (*type* in Herb. AMES No. 44112).

Acoridium apiculatum is most closely allied to *A. anfractum* AMES and its var. *anfractoides* (AMES) AMES. From both of these, it may easily be distinguished by the strongly fimbriated margins of the petals, by the apiculate tip of the strongly retuse mid-lobe of the lip and by the comparatively broader leaves.

5. *Acoridium Curranii* AMES var. *Serratoi* (AMES) AMES, comb. nov.

Acoridium Serratoi AMES in Sched. Orch. 6 (1923) 27, fig. 6.

The rather variable character of the lip does not warrant maintaining this as a species.

6. *Acoridium eximium* AMES, spec. nov.

Pseudobulbi anguste cylindracei, unifoliati. Folium elliptico-lanceolatum, nervis prominentibus quorum laterales non in margine. Inflorescentia terminalis, quam folium longior. Bracteae inflorescentiae ovatae,

glumaceae, conspicue nervosae. Sepala lateralia late lanceolata, acuta vel acuminata, trinervia. Sepalum dorsale late lanceolatum, acutum, trinervium. Petala late lanceolata, acuta vel acuminata. Labellum trilobatum; lobi laterales ovato-falcati, obtusi; lobus medius transverse oblongus, trilobulatus, lobuli laterales fere amplitudine lorum lateralium. Columna generis.

An epiphytic caespitose (?) herb about 2 dm. tall. Pseudobulbs narrowly cylindric, unifoliate, about 3 cm. long and 5 mm. in diameter when dry. Leaves elliptic-lanceolate, obtuse, 7—11 cm. long including the petiole, 6—13 mm. broad, with three to five prominent nerves of which the lateral ones are not on the margin. Inflorescence terminal, longer than the subtending leaf, 4—7 cm. long. Bracts of the inflorescence ovate, glume-like, conspicuously nerved, about 4 mm. long and 2 mm. broad. Lateral sepals broadly lanceolate, acute or acuminate, 3-nerved, about 4.5 mm. long and 2 mm. broad. Dorsal sepal broadly lanceolate, acute, 3-nerved, about 5 mm. long and 2 mm. broad. Petals broadly lanceolate, acute or acuminate, about 4 mm. long and 1.7 mm. broad. Lip 3-lobed, about 1.3 mm. long and 2 mm. broad when spread out; lateral lobes ovate-falcate, obtuse, about 1 mm. long; mid-lobe transversely oblong, about 0.5 mm. long and 1.5 mm. broad, trilobulate with the lateral lobules nearly as large as the lateral lobes of the lip. Column of the genus.

Luzon: Province of Rizal, Paningtingan, Montalban. Without date. LOHER 13221 (*type* in Herb. AMES No. 43803. *Duplicate type* in Herb. Bur. Sci., Manila).

The specimen on which this species is based is unfortunately in poor condition. The lip, however, which is dissimilar to that of any other species of *Acoridium*, sets it sharply apart from its closest allies.

The relationship of *A. eximium* seems to be with *A. longibulbum* AMES, or at least with the group of species including *A. mindorense* AMES.

7. *Acoridium oreophilum* AMES, spec. nov.

Pseudobulbi ovoideo-cylindracei, unifoliati. Folium elliptico-lanceolatum, obtusum, cum nervis tribus prominentibus quorum laterales non in margine. Inflorescentia terminalis, quam folium brevior vel folio subaequalis. Bractee inflorescentiae orbiculares, glumaceae, nervosae, serrulatae. Sepala lateralia late lanceolata, acuta, trinervia. Sepalum dorsale late lanceolatum, acutum. Petala lanceolata, acuta, trinervia. Labellum trilobatum, juxta sinum lorum lateralium callo mammillato et in medio labelli callo vel papilla ornatum; lobi laterales oblongo-falcati,

quam lobus medius transverso-oblongus breviores. Columna generis.

A caespitose epiphytic herb up to 15 cm. tall. Pseudobulbs ovoid-cylindric. Leaves elliptic-lanceolate, obtuse, 9—11 cm. long, 7—11 mm. broad, with three prominent veins, the lateral ones not on the margin. Inflorescence subequal to or shorter than the subtending leaf. Bracts of the inflorescence about 2—2.5 mm. long. Lateral sepals broadly lanceolate, acute, about 3.5 mm. long and 1.3 mm. broad. Petals lanceolate, acute, about 3 mm. long and 1 mm. broad. Lip 3-lobed, about 0.8 mm. long and 1.5 mm. broad (when flattened out; lateral lobes oblong-falcate, shorter than the transversely-oblong apiculate mid-lobe.

Luzon: Province of Rizal. Without date or exact locality. LOHER 15042 (*type* in Herb. AMES No. 43718. *Duplicate type* in Herb. Bur. Sci., Manila).

This species seems to be closely allied to *A. urciforme* AMES, but may be easily distinguished by the 3-lobed lip. Additional material is needed to place it more accurately within the genus.

8. *Acoridium sanguineum* AMES, spec. nov.

Herba epiphytica. Radices fibrosae. Pseudobulbi anguste conico-ovoidei, unifoliati. Pedunculus filiformis, adscendens, usque ad racemum nudus. Bracteae racemi glumaceae, anguste ovatae. Sepala lateralia late ovata, obtusa. Sepalum dorsale anguste ovatum, obtusum. Petala anguste rhombico-ovata, acuta vel acuminata. Labellum trilobatum, prope basim lobi utriusque callo oblongo-arcuato et in disco subsaccato callo oblongo ornatum; lobi laterales triangulari-falcati, acuti aut obtusi; lobus medius ligulatus, integer, reflexus. Columna generis. Flores sanguinei.

A caespitose epiphytic herb up to 25 cm. tall. Pseudobulbs conico-ovoid. Leaves linear-lanceolate, acute, 4—15 cm. long, 3—7 mm. broad, with three prominent nerves, the lateral ones near the margin. Inflorescence surpassing the leaves, rather lax. Bracts of the inflorescence 2.5—3.5 mm. long. Lateral sepals broadly ovate, obtuse, 4—4.5 mm. long, 3—4 mm. broad. Petals narrowly rhombic-ovate, acute or acuminate, 3.5—4 mm. long, about 2.5 mm. broad. Lip 3-lobed, about 2 mm. long; lateral lobes triangular-falcate, acute or obtuse, about 1 mm. long; mid-lobe ligulate, entire, strongly reflexed, about 1 mm. long.

Luzon: Province of Benguet, Mt. Pulog. June 1918. BOETTCHER s.n. (*type* in Herb. AMES No. 16659); Mt. Pulog. On tree. Altitude 8800 feet. January 1909. CURRAN, MERRITT & ZSCHOKKE 16348; Mt. Pulog July 1909. MCGREGOR 8844; Mt. Pulog. Mossy forest. Altitude 7500 feet. May 1909. MERRILL 6475.

Acoridium sanguineum is very closely allied to *A. cinnabarinum* (Pfltz.) AMES, from which it differs mainly in the structure of the lip. The lip of *A. sanguineum*, in contrast to that of *A. cinnabarinum*, is much less saccate, with larger lateral lobes, and with a ligulate deflexed rather than hastate mid-lobe.

9. *Acoridium Schweinfurthianum* AMES, spec. nov.

Herba epiphytica, caespitosa. Pseudobulbi longitudinaliter sulcati, anguste fusiformes, aggregati, unifoliati. Folium elliptico-oblongum, obtusum vel saepe mucronatum, nervis prominentibus cum nervis lateralibus in margine. Inflorescentia terminalis, quam folium longior. Bractee inflorescentiae rotundae, glumaceae, conspicue nervosae. Sepala lateralia triangulo-lanceolata, acuta, uninervia. Sepalum dorsale elliptico-oblongum, obtusum vel acutum. Petala rhombico-ovata, obtusa, uninervia, supra medium erosa. Labellum trilobatum, juxta sinum loborum laterali-um callo mammillato et in medio callo vel papilla ornatum; lobi laterales oblongo-falcati, obtusi; lobus medius triangularis, in basi paulo concavus. Columna generis.

A caespitose epiphytic herb up to 15 cm. tall. Pseudobulbs up to 3 cm. long, about 5 mm. in diameter when dry, longitudinally furrowed, narrowly fusiform, aggregated, unifoliate. Leaves elliptic-oblong, obtuse or often mucronate, 5—8 cm. long, 1—2.3 cm. broad, with three (rarely five or seven) prominent veins, the lateral ones marginate. Inflorescence surpassing the leaves, lax, terminal, with the raceme about 8 cm. long. Bracts of the inflorescence round, glume-like, conspicuously nerved, about 2 mm. long and 2—2.5 mm. broad. Lateral sepals triangular-lanceolate, acute, 1-nerved, about 3 mm. long and 1.5—2 mm. broad. Dorsal sepal elliptic-oblong, obtuse or acute, about 4 mm. long and 1.3 mm broad. Petals rhombic-ovate, obtuse, 1-nerved, upper half erose, about 3.5 mm. long and 2 mm. broad. Lip 3-lobed, about 1.5 mm. long and 2 mm. broad when spread out, near the sinuses of the lateral lobes there is a mammillate callus and in the middle a callus or papilla; lateral lobes oblong-falcate, obtuse; mid-lobe triangular, subacute, slightly saccate on the disc. Column of the genus.

Luzon: Province of Rizal, Mt. Tokduanbanoy. On tree tops, mossy forest. Altitude 4000 feet. November 26, 1926. RAMOS & EDAÑO 48602 (*type* in Herb. AMES No. 43708).

Acoridium Schweinfurthianum is most closely allied to *A. mindorense* AMES, from which species it is distinct both in the flower (particularly in the shape of the sepals and petals) and in the structure and venation

of the leaves. I have dedicated this species to my colleague, CHARLES SCHWEINFURTH, who had at one time studied the plant and laid it aside for further study and description.

10. *Acoridium Smithianum* AMES, spec. nov.

Pseudobulbi longitudinaliter sulcati, cylindracei, aggregati, unifoliati. Folium ellipticum, obtusum, cum nervis tribus (vel quinque) prominentibus quorum laterales in margine. Inflorescentia lateralis, quam folium brevior. Bractee inflorescentiae ovatae, glumaceae, conspicue nervosae. Sepala lateralia lanceolata, acuta, uninervia. Sepalum dorsale anguste lanceolatum, acutum. Petala lanceolata, acuta, margine fimbriata. Labelum trilobatum, juxta lobos laterales callo complanato et in medio labelli callo vel papilla ornatum, columnae basi sessile; lobi laterales lineares, acuti, sigmoidei; lobe medius semiovatus, apice obtusus, concavus. Columna generis.

A caespitose epiphytic herb up to about 13 cm. tall. Pseudobulbs cylindric, aggregated, longitudinally sulcate, unifoliolate. Leaves elliptic, obtuse, 7—13 cm. long including the petiole, 12—17 mm. broad, with three (or five) prominent nerves, the lateral ones on the margin. Inflorescence lateral, subequal to or shorter than the subtending leaf, with the lax raceme about 6 cm. long. Bracts of the inflorescence ovate, glume-like, strongly nerved, about 2 mm. long and 1.5 mm. broad. Lateral sepals lanceolate, acute, 1-nerved, 3.5—3.7 mm. long, about 1.5 mm. broad. Dorsal sepal narrowly lanceolate, acute, about 4 mm. long and 1 mm. broad. Petals lanceolate, acute, fimbriate, 2.7—3.1 mm. long, 0.7—1 mm. broad. Lip 3-lobed, about 2.5 mm. long, near the sinuses of the lateral lobes there is a complanate callus and in the middle of the lip a callus or papilla; lateral lobes linear, acute, slightly sigmoid; mid-lobe semiovate, obtuse, slightly concave, hardly 1 mm. long, shorter than the lateral lobes.

Acoridium Smithianum is another species of this genus in which the inflorescence originates laterally from the pseudobulb. It is very similar in many respects to the only other species with a lateral inflorescence, *A. pulcherrimum* AMES, and the relationship is no doubt very close. The leaves are approximately of the same shape and are marginate in both species. The leaves of *A. Smithianum* are often 5-nerved and obtuse, while those of *A. pulcherrimum* are only 3-nerved and are distinctly acute. The inflorescence of *A. Smithianum* is much more lax than that of *A. pulcherrimum*. The bracts of this species are shorter than those of *A. pulcherrimum* and all of the floral parts are smaller

and comparatively narrower. So far as is known, the ranges of *A. pulcherrimum* and *A. Smithianum* are from 100 to 150 miles apart.

This species is dedicated to Dr J. J. SMITH in recognition of his critical researches among the Orchidaceae of the eastern tropics.

Luzon: Province of Rizal, Montalban. May 1909. LOHER 12566a; Province of Rizal. January 1913. LOHER 13950; Province of Rizal. LOHER 15129. (*type* in Herb. AMES No. 43705).

11. *Acoridium tenuibulbum* AMES, spec. nov.

Herba epiphytica. Pseudobulbi tenues, aggregati, unifoliati. Folia lanceolata, acuminata, acuta. Inflorescentia terminalis, quam folium longior vel folio subaequalis. Bracteae inflorescentiae rhombico-ovatae vel in basi paulo auriculatae, glumaceae, conspicue nervosae. Sepala lateralia oblongo-lanceolata, acuta. Sepalum dorsale oblongo-lanceolatum, obtusum. Petala obovata, obtusa vel subacuta, saepe paulo crenulata. Labellum trilobatum, juxta sinum loborum lateralium callo crescentiformi et in basi disci callo vel papilla ornatum; lobi laterales oblongo-falcati, obtusi; lobus medius lobis lateralibus subaequalis, basi concavus, subquadratus sed longe obtuse apiculatus, saepe paulo carinatus. Columna generis.

A caespitose or subcaespitose epiphytic herb up to 3 dm. tall. Pseudobulbs slender, crowded, unifoliate, up to 9 cm. long, about 2 mm. in diameter when dry. Leaves lanceolate, acuminate or acute, with five prominent nerves (lateral nerves not marginate), 12—18 cm. long, 18—25 mm. broad. Inflorescence terminal, lax, elongated, subequal to or surpassing the subtending leaf. Bracts of the inflorescence rhombic-ovate or at the base slightly auriculate, glume-like, conspicuously nerved, about 3 mm. long and nearly as broad. Lateral sepals oblong-lanceolate, acute, 3-nerved, about 3 mm. long and 1.3 mm. broad. Dorsal sepal oblong-lanceolate, obtuse, about 3 mm. long and 1.5 mm. broad. Petals obovate, acute or rarely subacute, often slightly crenulate, about 2.8 mm. long and 1.8 mm. broad. Lip 3-lobed, about 1.5 mm. long and 2 mm. broad when spread out, near the sinus of the lateral lobes there is a crescent-shaped callus and at the base of the disc a callus or papilla; lateral lobes oblong-falcate, obtuse, about 1.5 mm. long; mid-lobe subequal to the lateral lobes, concave at the base, subquadrate but long obtuse-apiculate, often slightly carinate.

Luzon: Province of Rizal, Balaabac. May 1916. LOHER 13046 (*type* in Herb. AMES Nos 43691 and 43770); Montalban. April 1915. LOHER 13144.

Acoridium tenuibulbum is closely allied to *A. mindorensis* AMES, but differs from that species in the following particulars:

1. The inflorescence of *A. mindorensis* is dense, and the peduncle is short in comparison with that of *A. tenuibulbum*.
2. The pseudobulbs of *A. mindorensis* are shorter and much stouter than those of *A. tenuibulbum*.
3. The leaves are obtuse in *A. mindorensis*, while in *A. tenuibulbum* they are acuminate and acute.
4. The bracts, petals, sepals and lip of *A. mindorensis* are very similar in shape to those of *A. tenuibulbum*, but each organ is considerably larger.
5. The two contrasted species, so far as is known, occupy different localities.

It must be admitted, however, that *A. tenuibulbum* is very closely related to *A. mindorensis*, and, when more material is available, it may prove to be conspecific.

12. *Acoridium urciforme* AMES, spec. nov.

Pseudobulbi lineari-cylindracei, unifoliati. Folium anguste ellipticum, obtusum, cum nervis tribus vel quinque prominentibus quorum laterales non in margine. Inflorescentia terminalis, densa, folio subaequalis. Bracteae inflorescentiae ovatae, glumaceae, nervosae. Sepala lateralia late lanceolata, trinervia. Sepalum dorsale oblanceolatum, oblongum. Petala late lanceolata, acuta. Labellum integrum, explanatum latius quam longius, paulo concavum et tricallosum. Columna generis.

A caespitose epiphytic herb up to 25 cm. tall. Pseudobulbs linear-cylindric, unifoliate, up to 4 cm. long and 3 mm. in diameter when dry. Leaves narrowly elliptic, obtuse, with the petiole 12—17 cm. long, 9—12 mm. broad, with three to five prominent veins, the lateral veins not on the margin. Inflorescence terminal, compact, subequal to the leaves, 6—8 cm. long including the raceme. Bracts of the inflorescence ovate, glume-like, strongly nerved, about 3 mm. long. Lateral sepals broadly lanceolate, 3-nerved, about 4 mm. long and 1.5 mm. broad. Dorsal sepal oblanceolate-oblong, about 4.2 mm. long and 1.5 mm. broad. Lip entire, subreniform, broader than long when spread out, somewhat concave, with three calli, shaped much like the lip of a pitcher when in natural position, about 1 mm. long and 2 mm. broad.

Luzon: Province of Rizal, Montalban, Mt. Paminglingan. April 1912. LOHER 13276 (*type* in Herb. AMES No. 43716. *Duplicate type* in Herb. Bur. Sci., Manila).

This species is most closely allied to *A. turpe* AMES, from which it may be distinguished by its much narrower perianth segments and by the lack of lateral lobes on the lip. In natural position the lip of *A. urciforme* is urceolate, while that of *A. turpe* is more explanate.