A NEW SPECIES OF CORBYAS (ORCHIDACEAE)
FROM PAPUA NEW GUINEA

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Corybas royenii Kores, sp. nov. — Fig. 1.

Herba parva erecta, 1—3(—7) cm alta. Tuber globosum, 4—6 mm diam., albidum aut dilute brunneum, subtiliter villosum. Rhizomata atque pars subterranea albida, sparse villosa. Pars suprater-
anea caulis dilute viridis, glabra, ad basim per unicum vaginam tubularum inclusa. Vagina 8—12 mm
longa, uninervis, distaliter palatum expanse, ultimo discreta per 1—2 mm, pars discreta acuminata,
apice cirriformi. Caulis semiterete 1—7(—10) cm longus. Folium ovatum aut elliptico-ovatum, 1.5—3(—
6) per 1—1.5(—2) cm latum, supra palide viride, infra palidius, apex anguste acuminatus, basis breve
attenuata atque in duas costas caulem decurrens, costa supra impressa, infra manifeste elevata, nervi
basales utroque latere 1, convergati, nervi suprabasales 4 ad 6 utroque latere, laxe scalariformiter reticulati,
venae marginales absunt. Pedicellus teres, 2—4 mm longus, glaber, per unicum bracteam subtensis. Bractea
linearis, canaliculata, (5)—10—17 per 2—3 mm, dilute viridis, anguste acuta, uninervis, glabra. Ovarium
ascends, atque paululum inflexum, cylindricum, 6—10 per 2—3 mm, viridi-albidum, tortum, 6-sulcatum, glabrum. Sepalum medium erectum, spatulatum, 20—30 mm longum in totum, 7—9-
nervatum, albidum, virgis angustis rubidis 5 ad 7 secundum nervas medias lateralesque praeditum, unguis
anguste attenuatus, canaliculatus, 10—15 mm longus, lamina ovata, 10—15 mm per 7—14 mm, marginem vix aut
non inflexo, integro, apice obtuso. Sepala lateralia reducta, subulata, 3—6 per 0.5 mm, subviridia, uninervia, glabra. Petala lateralia discreta, erecta atque paululum reflexa, linearia, acuta, 15—30 per 2—3 mm, ad bases albidovireida, distaliter gradatim ad rubida fuscantia, ultimo erythro-
nigra ad apices, uninervia, glabra. Labium erectum, infundibulare, abrupte reflexum atque ad limbum
horizontaliter expansum, 15—20 mm longum in totum, ad basim conspicue bicalcaratum, calcaria 2—3
mm longa, tubus 10—15 mm longus in totum, dorsaliter per totam longitudinem conspicue inflatus,
parte inflata longitudinali carinata et laterali valde compressa, tubus basi viridis ad viridi-albidus, in
parte media gradatim ad viridi-brunneum fuscans, partes superiores tubi faucisque porphyre-
brunneae, maculis brunneis irregulariter dispositis praeditae, limbus late cordatus, 8—12 per 7—10 mm,
apice obtuso, deflexo, margine inflexo, membranaceo, irregulariter fimbriato-laciniate, parte limbi
centralis in umbonem hemisphericalem, 6—10 mm latum, 1—2 mm altum expansa,umbo, fauc et pars
limbi interior purpureo-nigra, laxe minuteque pubescens, limbus externe viridi-albidus, maculis brunneis
irregulariter signatus, glaber. Columna erecta, 2 mm longa. Fructus non observatus.

Small, erect herb, 1—3(—7) cm tall. Tuber globose, 4—6 mm in diameter, white
or light brown, finely villose. Rhizomes and subterranean portion of the stem white,
scattered villose. Above ground portion of the stem light green, glabrous, enclosed
at the base by a single, tubular sheath. Sheath 8—12 mm long, 1-nerved, slightly
flared distally, ultimately free for 1—2 mm, free portion acuminate, apex cirriform.
Stem semiterete, 1—7(—10) cm long. Leaf ovate or elliptical-ovate, 1.5—3(—6) by
1—1.5(—2) cm, light green above, paler below, apex narrowly acuminate, base
shortly attenuate and decurrent into 2 ribs of the stem, midrib impressed above,
prominently raised below, nerves 2 on either side of the midrib, convergent,
subprabasal nerves 4 to 6 on either side of the midrib, laxy scalariform reticulate,
marginal veins absent. Pedicel terete, 2—4 mm long, glabrous, subtended by a single
Figure 1. Corybas royenii Kores.
bract. **Bract** linear, channelled, (5—)10—17 by 2—3 mm, pale green, narrowly acute, 1-nerved, glabrous. **Ovary** ascending and slightly inflexed, cylindrical, 6—10 by 2—3 mm, greenish-white, twisted, 6-grooved, glabrous. Median **sepal** erect, spatulate, 20—30 mm long overall, 7—9-nerved, white with 5—7 narrow maroon bands running along the mid and lateral nerves, claw narrowly attenuate, channelled, 10—15 mm long, blade ovate, 10—15 mm by 7—14 mm, margin slightly or not inflexed, entire, apex obtuse. Lateral sepals reduced, subulate, 3—6 by 0.5 mm, light green, 1-nerved, glabrous. Lateral **petals** free, erect and slightly reflexed, linear, acute, 15—30 by 2—3 mm, whitish-green at the base, darkening gradually to maroon distally, ultimately becoming reddish-black at the tips, 1-nerved, glabrous. **Lip** erect, infundibular, abruptly reflexed and expanded horizontally at the limb, 15—20 mm long overall, conspicuously bicalcarate at the base, spurs 2—3 mm long, tube 10—15 mm long in all, conspicuously inflated dorsally along its entire length, inflated portion longitudinally keeled and strongly compressed laterally, green to greenish-white at the base, gradually darkening to greenish-brown medially, upper portions of the tube and throat purple-brown with irregularly spaced brown blotches, limb broadly cordate, 8—12 by 7—10 mm, apex blunt, deflexed, margin inflexed, membranous, irregularly fimbriate-laciniate, central portion of the limb expanded into a hemispherical boss, 6—10 mm wide by 1—2 mm tall, boss, throat and interior of the limb purple-black, laxly, minutely pubescent, limb externally greenish-white, irregularly marked with brown blotches, glabrous. **Column** erect, 2 mm long. **Fruit** not seen.


**Notes.** C. **royenii** is a very unusual and extremely prolific species, which tends to form large populations with a very localized distribution. The new species may be distinguished from other species of *Corybas* on the basis of its attenuate leaf base and broadly spatulate, erect median sepal. *C. royenii* appears to be most closely allied to *C. gibbiferus* (Schltr.) Schltr. known from New Guinea. The two species are similar in that both have a spatulate median sepal and a labellum which is inflated dorsally throughout the length of the tubular portion with an irregularly fimbriate-laciniate margin. *C. royenii* can be distinguished from *C. gibbiferus* on the basis of the attenuate as opposed to cordate leaf base. The median sepal in the new taxon is erect, spatulate, uncrested, with a relatively broad blade, while the median sepal in *C. gibbiferus* is hooded, ovobovate-spatulate, crested, with a relatively narrow blade. In addition, the lip in *C. gibbiferus* is glabrous and expanded vertically at the limb with a reflexed margin, while the lip in *C. royenii* is laxly minutely pubescent and expanded horizontally at the limb with an inflexed margin.

The specific epithet of this new species has been given in honour of Dr. Pieter van Royen, Chairman of the Department of Botany, Bernice P. Bishop Museum, Honolulu, Hawaii; a long standing scholar on tropical vegetation and noted authority on the alpine flora of New Guinea.
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