Epidendrum icthyphyllum Ames sp. nov. Radices crassae. Pseudobulbi validi, basi vaginati, pyriformes. Folia elongato-ligulata, coriacea. Scapus elongatus. Flores in paniculam ramosam laxam dispositi. Sepala lateralia lanceolata, acuta, carnosa. Petala spathulata, subacuta, carnosa. Labellum inaequaliter trilobatum; lobis lateralibus lineari-oblongis, acutis; lobo terminali basi oblongo, supra medium subelliptico. Discus inter lobos laterales callo elevato ornatus, per medium trinervius. Columna apice utrinque lobulata.

Roots very coarse, up to 3 mm. or more thick, whitish, smooth. Pseudobulbs about 8 cm. long, tapering gradually upwards, pyriform, clothed at base with several elongated sheaths which soon break down into straggling fibres. Leaves several, up to 60 cm. or more long, 2.5-3 cm. wide, ligulate, tapering gradually to a pointed tip, imbricating at base, mid-nerve prominent. Peduncle with the paniculate inflorescence as much as 13 dm. long; the branches of the panicle obliquely ascending, 1 dm. more or less apart, often exceeding 30 cm. in length, subtended by triangularlanceolate concave acute bracts which are 1.5 cm. long. Flowers numerous, about 1.5 cm. distant on the slender branches of the panicle, subtended by concave acute triangular bracts which are 5-12 mm. long. Pedicel with the ovary 2 cm. long in well-developed flowers, smooth, very slender. Lateral sepals 1-1.2 cm. long, 3.75-4 mm. wide near the middle, lanceolate from a broad base, acute, thickened at the tip, fleshy, reddish brown in dried specimens. Dorsal sepal 1-1.3 cm. long, narrowly oblanceolate from a wide base, obtuse or subacute. Petals 1-1.2 cm. long, 3 mm, wide above the middle, about 1 mm, wide at base, spatulate, subacute, fleshy. Labellum 9-10 mm. long, unequally 3-lobed, adnate to the column only at base, fleshy

(probably whitish or yellowish when alive, with scattered purplish dots); lateral lobes 3 mm. long, about 1 mm. wide, narrowly oblong, pointed, divaricate; middle lobe 5 mm. long, 5 mm. wide just below the tip, oblong at base, gradually dilated and subelliptical above the middle, subtruncate at the tip. Disc between the lateral lobes ornamented with a large cushion-like callus from which three nerves extend forward, the middle one prominent near its base. Column 5 mm. long, rather stout, obtusely lobed on each side at the summit.

A very distinct species allied to *Epidendrum virgatum* Lindl., with which it has been confused, but from which it is distinct in having much longer leaves, a longer inflorescence, and a differently shaped labellum.

In Folia Orchidacea (Epidendrum 13), under E. virgatum, Lindley cited a single collection, that of Hartweg from the mountains of Cobán, Guatemala (erroneously localized in Mexico by Lindley). This specimen is conspecific with E. icthyphyllum, and should not be confused with the type of E. virgatum, which is a Mexican species brought from the State of Oaxaca by Karwinski and preserved in the Herbaria of Martius and Zuccarini. In Lindley's Herbarium at Kew there is a fragment of a Mexican specimen from Zuccarini, which I take to be the true E. virgatum. This has the suborbicular or obovate mid-lobe of the labellum characteristic of all Mexican material I have examined. In addition to the Zuccarini specimen there is, in Lindley's Herbarium, a specimen collected by Jurgensen in Mexico which Lindley did not determine, but which Rolfe accepted as Epidendrum virgatum.

Epidendrum virgatum, although variable in the shape of the labellum lobes, is usually well characterized by its vegetative parts, the pseudobulbs rarely exceeding 4 cm. in length, the leaves averaging about 20 cm. in length. In 1905 I received from C. G. Pringle a number of living specimens of the species collected in Mexico, which flowered very freely in my greenhouses. The dried specimens prepared from this material show broader lateral lobes of the labellum than are characteristic of the specimens in Lindley's

Herbarium, also the petals are much narrower in proportion to their length than in other Mexican material I have referred to *E. virgatum*. Whether or not there is a third species in this alliance is at present a debatable question.

With Lindley's specimens there is a sketch of a lip. This was probably made from the Mexican plant, as it exhibits the rounded mid-lobe characteristic of the Mexican material I have observed, and agrees with the Zuccarini specimen rather than with that of Hartweg, both of which are mounted on the same sheet in Lindley's Herbarium. One wonders if by any chance Lindley could have had before him both the Mexican and Guatemalan specimens at the time he drew up the original description of Epidendrum In the original description, his characterization of the inflorescence seems to include the Guatemalan specimen from Cobán. He described the flowers as being in a long, lax, graceful panicle, the branches of which are simple and sometimes as much as a foot long, with nearly twenty flowers on each. Undoubtedly Lindley regarded the Mexican and Guatemalan specimens as one and the same species (as already stated they are mounted on the same sheet in his herbarium). In Folia Orchidacea, under E. virgatum, he cites only the Cobán specimen, but in his notes he compared the general appearance of the plant to Epidendrum vitellinum, a comparison which is hardly comprehensible unless he had in mind the more dwarf habit of Mexican specimens. In the original description, in the third volume of Hooker's Journal of Botany, he omitted a reference to pseudobulbs and leaves, as at that time he had seen only the inflorescence. However treated the situation is extremely perplexing. From the present state of our knowledge it seems best to regard the Zuccarini specimen as the type of E. virgatum and to refer the Hartweg specimen from Cobán to Epidendrum icthyphyllum, with which it seems to be conspecific.

GUATEMALA, Department of Alta Verapaz, Cobán, H. v. Tuerckheim II 1797, May 1907. Auf der Erde in Fichtenwäldern. 1350 meters altitude. (Type (two sheets, one showing the habit, the other the inflorescence) in Gray

Herb. Duplicate type in U. S. Nat. Herb. Nos. 825830, 825831): Cobán, H. v. Tuerckheim 54, April 1879. Epiphyte. (U. S. Nat. Herb. No. 814235.)