STUDIES IN THE EQUITANT ONCIDIUMS II

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Introductory Notes

This is a continuation of the work presented in <u>Phytologia</u> Vol. 15, No. 1, 2-12, June 1967. These notes are to describe two new species and insert the description of two varieties omitted from the first article.

Oncidium variegatum, the type species, is a loose growing mass of plants on medium length rhizomes and with masses of aerial roots. It is not a strong grower and therefore falls all over itself. It has a wider distribution in the West Indies than any other species but is not found in Jamaica, the Bahamas or Florida. There are only six species of this type with long rhizomes - 0. bahamense, 0. scandens (which is described herein), 0. velutinum, 0. hawkesianum, 0. sylvestre and 0. variegatum. The first three named are tetraploid with 84 chromosomes while the fourth (0. hawkesianum) has 133. 0. variegatum has 40 and the count for 0. sylvestre is not known.

There was published in Cytologia Vol. 27, No. 3: 306-313 Oct. 1962 the results of a study on the chromosome numbers of the Oncidium alliance. In this list there are many changes to be made in the names of the plants. The name O. knescoffii was not a described species and is described as O. scandens herein: O. sp. from Abaco = O.lucayanum, Nash ex Britt., O. Moir = O. bahamense, Nash ex Britt., O. sylvestre Ldl. = O. velutinum Ldl. and O. leiboldii Reichb. f. fma album Hort. = O. Leiboldii Reich. f. var album Moir.

0. sylvestre has horizontal rhizomes, grows in short grass in Cuba, and has very few, terete, erect leaves. It has a great similarity to 0. bahamense. However 0. bahamense has rhizomes groing straight upwards and 0. sylvestre grows horizontal.

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This species has a loose mass of growths on short rhizomes and many aerial roots. Several colors occur and in various habitats but all have the same crest. The following two varieties are worthy of validation botanically.

ONCIDIUM VARIEGATUM Sw. var ROSEUM Moir, var. nov. Differt a form typica planta dimidia, foliis tenuis, erecta, habitu compactis. Floribus roseis, cristis labello flavis.

Plant one-quarter as large as typical species, more compact, with short rhizomes. Inflorescence erect, short, few flowered. Leaves more erect and falcate than typical, flowers in addition to being of deep pink color have a fuller lip that makes up about 90% of the flower. Crest deep yellow and same as <u>O. variegatum</u>. Hispaniola: Collected in south-eastern area near El Seibo. Flowering in cultivation in Honolulu for 15 years.

ONCIDIUM VARIEGATUM Sw. var. PURPUREUM Moir, var. nov. Differt a form typica planta bis majoribus. Floribas griseo purpureis.

Plant grey green and more erect than type, with shorter rhizomes. Inflorescence long, of fewer flowers. Flowers large, greyish purple, with a mottled design on both front and back. Crest same as type.

on both front and back. Crest same as type. Virgin Isles: St. Thomas: Water Isle in shrubs and tall grass altitude about 25 feet, summer 1963; Walter Phillips, s.n., flowering in cultivation, Honolulu 1966.

ONCIDIUM SCANDENS Moir, sp. nov. (Oncidium "kenscoffii" hort.)

Pseudobulbi nulli. Rhizoma erecta 8 - 30 cm longa, planta flabelliforma, scandens, folia sessilis, falcata, 5 - 18 cm longa, 5 - 7 mm lata. Inflorescentia racemosa, ad 40 cm long, erecta.

Pseudobulbs absent. Growth rampant, climbing, erect on long vertical rhizomes 8 cm to 30 cm long. Growth large, wide, flabelliform, with many aerial roots at base of leaves. Leaves sessile, green, 8 - 30 in number, very falcate, rigid, top surface lightly grooved, roughly denticulate margins, 5 - 18 cm long, 5 - 7 mm broad, acute to apiculate. Inflorescence racemose, many flowered, rarely branching, scape up to 40 cm long, often shorter, rigid, erect; floral bracts linear, the tips often recurved, to 3 mm. long. Sepals obovate oblong, subspatulate, apically truncate and apiculate, 7 - 9 mm long 3 mm broad, laterals connate into a 2

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apiculate synsepal. Petals obovate, spatulate, retuse, apiculate to 8 mm long, apically 4 - 6 mm broad. Lobes broadly triangular, rounded ends, isthmus narrow, somewhat tubular to make lower lobes reflex on sides, margin of isthmus slightly denticulate, lower lobes broadly circular because of tubular isthmus, 1.2 - 1.6 cm long, 1.3 - 1.5 cm broad when flattened out; crest with upper section horizontally linear, lower section of 3 parts turned upwards, center one longest, total 5 parts. Column wings membranaceous, acute, semiovate marginally entire. Flowers light to dark rose color depending on media on which it is growing: on acid media very pale color, on alkaline media deep rose.

Haiti: 6000 ft. elevation in pine forests and grass above and beyond Kenscoff.

This species is found in many areas in Hispaniola in the upper elevations, never at low elevations. It has 84 chromosomes. Flowers similar to 0. variegatum but thinner in texture, with tubular isthmus and top of crest level - not like water buffalo horns as in 0. variegatum.

ONCIDIUM CAYMANENSE Moir, sp. nov.

Planta parvissima, caespitosa, pseudobulbi nulli. Folia flabelliforme, triangularis, oblonga, acuta, margine denticulata, ad 3 cm longa, ad 8 mm lata. Inflorescentia gracilis, racemose; scapus ad 4 cm altus, spica pauciflor, flores rotundatis, bracteae minutae, triangulae, 2 mm longae, pedicelli cum ovarii circ, 1 cm longi. Sepalum dorsale oblanceolatum, 1 cm longa vix 2 mm lata; lateralia in synsepalum formantia. Petala e basi cuneata obovata, rotundata, brevi-apiculata, 1 cm longa vix 5 mm lata. Labellum lobi lateralibus parvi, lobum medium reniforme, 1 cm longa vix 1.5 cm lata; isthmi nulli; cristae callis 5 pars, superior 2 pars libratis, inferior 3 pars.

Very small tufted plant without pseudobulbs. Leaves triangular, oblong, acute with toothed edges, 3 cm long by 8 mm broad. Inflorescence thin, a raceme of 4 cm length with 2 - 4 small round flowers of pale pink color. Dorsal sepal oblanceolate, 1 cm long by 2 mm wide; lateral sepals forming a synsepal. Petals obovate in a wedge shape, rounded and with small apicule, 1 cm long by 5 mm broad. Labellum 1 cm long by 1.5 cm broad, side lobes small, middle lobe reniform; essentially no isthmus; crest in two sections, upper parts horizontal, lower three parts in triangular arrangement, making a total of 5 parts.

Cayman Islands: Grand Cayman, precise locality and original collector unknown. The plants were sent to Mr. Oris Russel in Nassau, Bahamas, who in turn gave them to the late Mr. Stanley Smith, of Nassau, who sent one speciman in flower to Hawaii, blooming during

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May - June.

The O. variegatum var. roseum plants are so minute at times and without rhizomes that they could be mistaken for small seedlings or even O. leiboldii. They flower on short spikes with never very many flowers, but the size of the labellum is very full compared to the rest of the flower. It has the definite O. variegatum crest, however. Flowers in March - April.

Oncidium variegatum var. purpureum is very unusual and not very common on Water Isle in the Virgin Isles, but has produced 0. x floride-phillipsae as the natural hybrid with 0. prionochilum that was described in Phytologia Vol. 15, page 6, June 1967.

The name O. scandens was chosen as more descriptive of the plant, which occurs at higher elevations throughout Hispaniola. Also since the town Kenscoff is a considerable distance from the habitats of the species it was felt that the name should be changed. It also occurs in the Dominican Republic at somewhat lower elevations in the grass between Jarabacoa and Constanza and also on the road going to Bonao from Jarabacoa. In the areas in Haiti the long roots going down through the grass and pine needles often make club-like endings on the limestone rocks and the bauxite-like soil. There the color of the flowers is deep rose. However, by placing the plants on acid tree fern slabs or into trees the flowers are pale pink, in fact almost white. In very good conditions of growth the distance from tip to tip of leaves across the fan can exceed 12 inches and have as many as 15 leaves on each side in a beautiful arc with a notch in it at the top. From a single fan or two one can get a mass of plants about 12 inches deep and 2 feet up and down and 2 feet across in about 3 years.

This plant was first mistaken by me to be 0. <u>sylvestre</u> but that species has terete erect leaves in tufts of 5 - 6 terete leaves, with long rhizomes going sidewards as illustrated in the article on page 235 of The Orchid Journal Vol. 2, No. 5 (May - June 1953). All the plant and floral characteristics of 0. scandens are very dominant in breeding and these carry on into the F 2 and F 3 generations even when crossed with species with tufted non rhizome forming growth.

O. caymanense is the smallest tufted species while O. hawkesianum is the smallest species with rhizome growth. O. lucayanum in the Bahamas is a bit larger than O. caymanense in native habitats.

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