NEW SPECIES OF HOYA (APOCYNACEAE – ASCLEPIADOIDEAE) FROM SABAH, MALAYSIA
HOYA RANAUENSIS, sp. n.

T. Green* and D. Kloppenburg**

*Green: Plant Research, P O Box 597, Kaaawa, Hawaii 96730
** 6427 North Fruit Ave., Fresno, California 93711

ABSTRACT: To add to the approximately 60 described species of Hoya from Sabah, this new species is from the Ranau District of Eastern Sabah, a plant that could be confused with Hoya vitellinioides, Bakh. f. that is found in the same area. In growth, Hoya ranauensis is similar to Hoya vitelliniodes but with differing venation and leaf edge, larger umbel and differing floral parts.

KEY WORDS: Hoya, Hoya ranauensis, Hoya vitelliniodes

Hoya ranauensis  T. Green & Kloppenburg sp. nova.

Diagnosis:
A tropical, epiphytic, branching vine, with smooth round stems, occasionally rooting along stems; widely spaced elliptic to lanceolate leaves with an obtuse to cuneate base, smooth, tip acute, with thick texture; nerves conspicuously pinnate with the 4-7 secondary nerves, about 45 degrees to the midvein, anastomosing outwardly; blade 10-20 cm long by 4–7.5 cm wide, glandless; petiole 0.3-0.5 cm x 1-2 cm, fleshy; peduncle round, 0.3 cm in diameter x 1.0 cm - 2.5 cm long, permanent, bearing a hemispheric, many flowered (30-40) umbel; pedicels thread-like, 2 cm long and 0.10 cm in diameter; calyx 5 lobed, small 0.3 cm; corolla 5 lobed 1.5 cm in diameter: corona 5 lobed, ovate. Ovaries, 2. Seed pod not seen.

Corolla ivory with red tips, corona white. Fragrance pleasant and spicy. Milky sap in vegetation.

Ex hort garden of Ted Green, Kaaawa, Hawaii, original collection TG 04024, from the Poring Hot Springs area, at 1800 ft. elevation. HOLOTYPE 757786 (BISH), here designated.

Ted Green
April 2014
Typical Umbel

Typical leaf venation

General growth

Leaf Comparison: H ranauensis at top, vitellinioides at bottom (note erose/crenulate edge)
FLORAL PARTS:

**Pedicel:** section enlarged 38x, they are strict, terete, glabrous, 2 cm long and 0.10 cm in diameter

**Calyx:** below, side view enlarged ca. 18x. the base is bulbous surface is granulate, sepals sub-ovate with basal overlap 0.05 cm, apices are rounded, central thickened and with thin edges.

**Ovaries:** short dome shaped, 0.14 cm long and base pair 0.10 cm wide, apex only slightly modified.

**Corolla:** lobe section dorsal surface, enlarged 10x, this surface is glabrous and with scattered granules. At anthesis it is reflexed.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinus – sinus</td>
<td>0.31 cm</td>
</tr>
<tr>
<td>Sinus – center</td>
<td>0.20 cm</td>
</tr>
<tr>
<td>Sinus – apex</td>
<td>0.62 cm</td>
</tr>
<tr>
<td>Apex – center</td>
<td>0.75 cm</td>
</tr>
<tr>
<td>Widest</td>
<td>0.45 cm</td>
</tr>
</tbody>
</table>

**Corolla:** ventral surface, enlarged as above this surface is nearly slick glabrous.
**Corona:** ventral surface enlarged ca. 11x. The lobes are channeled with rounded edges, surfaces are diagonal sulcate, Anther wing apices duplicate and extend from the sinuses 0.03 cm. The central column is 0.10 cm long 0.10 cm in diameter, thin walled and surrounding area clean.

Corona: dorsal surface enlarged as above, the inner lobes are dentate and do not reach the center, dorsal is horizontal and slightly concave with a broad central rise, edges are sharp, apex is acute slightly emarginate.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apes – apex</td>
<td>0.30 cm</td>
</tr>
<tr>
<td>Apex - center</td>
<td>0.32 cm</td>
</tr>
<tr>
<td>Widest</td>
<td>0.17 cm</td>
</tr>
<tr>
<td>Ret. – ret. / center</td>
<td>0.10 / 0.08 cm</td>
</tr>
<tr>
<td>Aw. – Aw. / center</td>
<td>0.20 / 0.15 cm</td>
</tr>
</tbody>
</table>

Corona: lobe side view enlarged ca. 23x. the scale is 0.25 cm thick, nearly horizontal with inner lobe raised slightly, outer apex slightly emarginate.

Pollinarium enlarged 110x.

**Pollinium**
- Length: 0.50 mm
- Widest: 0.19 mm

**Retinaculum**
- Length: 0.15 mm
- Shoulder: 0.12 mm
- Waist: 0.06 mm
- Hip: 0.08 mm
- Ext.: 0.04 mm

**Translator**
- Length: 0.12 mm
- Widest: 0.02 mm

**Translator/caudicle type:** ls/o

**Caudicle**
- Bulb diam.: 0.06 mm

**Etymology:** After the place where it was found: the Ranau District of Sabah, Malaysia - On the eastern slope of Mt. Kinabalu.

**Conservation:** Along streams in many areas that do not seem to be in way of human development, except possibly roads and bridges.