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ABSTRACT. Croton rufolepidotus Caruzo & Riina (Euphorbiaceae s. str.), a new species from Colombia, is here described and illustrated. The new species is endemic to an area of lowland secondary forests in Antioquia. Morphological characters indicate that this species belongs to Croton sect. Cleodora (Klotzsch) Baill. due to its arborecent habit, petiolar glands, 15 to 25 stamens, as well as the pistillate flowers with imbricate sepals and multifid styles.

Key words: Colombia, Croton, Croton sect. Cleodora, Euphorbiaceae, IUCN Red List.

Croton L. is a pantropical genus with an estimated 1223 species in the Euphorbiaceae family (Govaerts et al., 2000). Although the genus occurs mostly in tropical regions worldwide, it also has some representatives in subtropical and northern temperate areas. In the Neotropics, its centers of diversity are Brazil, the West Indies, and Mexico (Burger & Huft, 1995). In Colombia, there are 80 species of Croton (Murillo, 2004), including herbs, shrubs, and trees occurring in all kinds of habitats, with the greatest number of species concentrated in the Andean region of the country (Murillo, 1999). As a result of ongoing systematic studies on Croton sect. Cleodora (Klotzsch) Baill. by the senior author, new species have been described for that section (Caruzo et al., 2008, 2010). In this paper, we describe C. rufolepidotus Caruzo & Riina, a new species of Croton sect. Cleodora known from Antioquia Department, Colombia, where it grows in lowland secondary forests.

Croton rufolepidotus Caruzo & Riina, sp. nov.

TYPE: Colombia. Antioquia: Tarazá, Cór. El 12, camino El 12–Barro Blanco, Km 4 NO Medellín, 210 km en troncal del Caribe, hst/lmh, 7°30’S, 75°16’W, 25 July 1987, R. Callejas, J. Betancur & F. J. Roldán 3611 (holotype, MO; isotypes, DAV, HUA, US). Figure 1.

Hae species Crotoni salutari Casar. affinis, sed ramulis cylindriscis, stipulis auriculatis, inflorescentia omnibus cylinis proximalibus pistillatis, bracteis linearius, staminibus 15 ad 25, floribus femineis majoribus lobis calycis foliaceis non carnosis petalis reductis carentibus et stylis multifidis differt.

Tree 6–10 m tall, monoecious, indument rufous-silvery, lepidote trichomes, covered by reddish and scattered pale trichomes. Pistillate flowers with a central ray, trichomes pale, reddish, or sometimes with a reddish center and a pale margin; branchlets terete, rufous-silvery, covered by reddish and scattered pale trichomes. Leaves alternate; lamina 3–11.5 cm × 1–4.5 cm, narrowly ovate to ovate-elliptic, discolorous, apex narrowly acute to acuminate, base rounded to slightly cordate, margin entire, adaxial surface glabrous, abaxial surface densely lepidote, covered by pale trichomes and scattered reddish trichomes or trichomes with a reddish center and a pale margin, venation pinnate, brochidodromous, secondary veins 5 to 11, abruptly upturned toward the next ones, tertiary veins inconspicuous; petiole 0.5–1.5 cm, with a pair of stalked basilaminar glands ca. 1 mm diam., stalks 1–1.5 mm; stipules 0.5–1.5 cm, auriculate, apex caudate, deciduous. Inflorescence axis terete, striate, lepidote; proximal cymules pistillate, with a single flower, distal cymules staminate, with 1 or 2 flowers, bracts 3–5 mm, linear, prophylls inconspicuous. Staminate flowers ca. 1 cm, campanulate, pedicels ca. 6 mm; calyx ca. 4 mm, lepidote externally, rufous-silvery, covered by reddish and scattered pale trichomes, glabrate internally; calyx lobes 5, united up to half of their length, ca. 2 mm, entire, equal, valvate, triangular, apex acute; petals ca. 4 mm, spatulate, densely villous externally, apex with an uneven margin; disk 5-segmented; stamens 15 to 25, filaments subulate; receptacle villose with simple trichomes. Pistillate flowers 1–1.4 cm, flask-shaped; pedicel 4–6 mm; calyx 6–8 mm, lepidote externally, rufous-silvery, covered by reddish and scattered...
pale trichomes, glabrate internally; calyx lobes 5, united at the base, 6–8 mm, equal, quincuncial, ovate-lanceolate, foliaceous, not fleshy; petals absent; disk entire, slightly 5-lobed; ovary sub-globose, lepidote; styles 3, connate at the base, then divided into 3 short columns ca. 1/3–1/2 of the stylar length, each one branching into 8 terminal arms, with a total of 24 tips. Capsules ca. 1.5 cm,
subglobose, 3-angled, lepidote, sepals slightly accrescent; seeds not seen.

**Distribution and habitat.** *Croton rufolepidotus* is endemic to Antioquia, Colombia, where it grows in lowland secondary forests, between 180 and 310 m elevation. According to R. Callejas (pers. comm.), much of the area where this species has been collected has since been deforested for coca plantations (*Erythroxylum coca* Lam. and *E. novogranatense* (D. Morris) Hieron.).

**IUCN Red List category.** Following IUCN Red List criteria (IUCN, 2001), *Croton rufolepidotus* can be considered as Critically Endangered (CR B1ab) due to its restricted distribution (known from only one location) and the continuing decline of the area and quality of habitat where the species occurs.

**Etymology.** The specific epithet of this new species is taken from the Latin and refers to the rufous color of its lepidote indument.

**Relationships.** Following the sectional synopsis of *Croton* by Webster (1993), and based on current revisionary work and phylogenetic studies on *Croton* sect. *Cleodora* by the first author, the new species clearly belongs to this Neotropical section. The suite of characters shared by members of section *Cleodora* are the arborescent habit; the petiolar glands in an abaxial or lateral position; 15 to 25 stamens; quincuncial or imbricate, usually accrescent, and sometimes fused pistillate sepals; and quadrifid (12 terminal tips) or multifid (more than 12 terminal tips) styles fused at the base or into a longer column.

Among the other species within section *Cleodora*, this new species is morphologically most similar to *Croton salutaris* Casar. from the Atlantic rainforest of southeastern Brazil (São Paulo, Minas Gerais, Rio de Janeiro, and Espírito Santo states), but that species differs from *C. rufolepidotus* in several features, which are shown in Table 1. The vegetative features that best distinguish *C. salutaris* from *C. rufolepidotus* are the stipule shape (linear-lanceolate in *C. salutaris* vs. auriculate in *C. rufolepidotus*) and branchlet morphology (angular in *C. salutaris* vs. terete in *C. rufolepidotus*).  


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**Literature Cited**


### Table 1. Principal characters distinguishing *Croton rufolepidotus* from *C. salutaris.*

<table>
<thead>
<tr>
<th>Character</th>
<th><em>C. rufolepidotus</em></th>
<th><em>C. salutaris</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trichomes</td>
<td>lepidote without a central ray</td>
<td>lepidote-porrect, with a long central ray angular</td>
</tr>
<tr>
<td>Branchlet shape</td>
<td>terete</td>
<td>linear-lanceolate</td>
</tr>
<tr>
<td>Stipule shape</td>
<td>auriculate</td>
<td>subulate</td>
</tr>
<tr>
<td>Bract shape</td>
<td>linear</td>
<td>pistillate and staminate</td>
</tr>
<tr>
<td>Proximal cymules of inflorescence</td>
<td>pistillate</td>
<td>15</td>
</tr>
<tr>
<td>Stamen number</td>
<td>15 to 25</td>
<td>7–8</td>
</tr>
<tr>
<td>Pistillate flower length (mm)</td>
<td>6–8</td>
<td>3–4</td>
</tr>
<tr>
<td>Pistillate calyx length (mm)</td>
<td>not fleshy</td>
<td>fleshy</td>
</tr>
<tr>
<td>Reduced pistillate petals</td>
<td>absent</td>
<td>present</td>
</tr>
<tr>
<td>Pistillate sepals in fruit</td>
<td>slightly accrescent</td>
<td>not accrescent</td>
</tr>
<tr>
<td>Division of styles</td>
<td>multifid (more than 12 terminal tips)</td>
<td>quadrifid (12 terminal tips)</td>
</tr>
<tr>
<td>Habitat</td>
<td>lowland secondary forest</td>
<td>montane rainforest</td>
</tr>
<tr>
<td>Distribution</td>
<td>Antioquia, Colombia</td>
<td>southeastern Brazil</td>
</tr>
</tbody>
</table>


