

# Noronhia linocerioides

Objekttyp: **Chapter**

Zeitschrift: **Boissiera : mémoires de botanique systématique**

Band (Jahr): **70 (2016)**

PDF erstellt am: **20.06.2024**

## **Nutzungsbedingungen**

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

## **Haftungsausschluss**

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

**44. *Noronhia linocerioides*** H. Perrier in Mém. Inst. Sci. Madagascar, Sér. B, Biol. Vég. 2: 288. 1949 (Fig. 30C).

**Typus:** MADAGASCAR. **Prov. Toamasina:** Près de Vatmandry, [19°20'S 48°59'E], IX.1921, *Perrier de la Bâthie 14111* (holo-: P [P00701478]!; iso-: P [P00701477, P00418112]!).

**Description** *Trees* to 14 m tall, trunk to 20 cm diameter; young twigs cylindrical, 0.5-1.7 mm diameter, glabrous; bark medium gray, smooth. *Leaves* opposite, persistent; bud scales rarely persistent; blades medium green glossy above, lighter below, narrowly to broadly elliptic, 3.5-13 × 1.5-5.5 cm, chartaceous, glabrous, domatia absent, base acute, margin flat to slightly undulate, apex acuminate, the acumen (0-)2-17 mm long, midrib flat to slightly sunken above, distinctly raised above, secondary veins conspicuous, 5-14 per side, 5-21 mm apart, looping 1-5 mm from the margin; petiole orange to red, 4-15 × 0.6-2.5 mm, not woody, glabrous. *Thyrse*s geminate to fasciculate, pauciflorous, compact to somewhat diffuse; peduncle 3-18 mm long, moderately to sparsely pubescent; pedicel 1.5-24 mm long, sparsely pubescent; calyx sparsely pubescent to glabrous outside, glabrous inside, lobes triangular, 0.5-1.2 × 0.6-1.5 mm; corolla pale yellow, subrotate, 2.2-5 mm long, glabrous on both sides, the tube 0.5-2.3 mm long, lobes ovate, apex slightly acute; corona present, 1-1.8 mm long, undivided; stamens 1.2-2 mm long, anthers depressed obovate, 0.8-1.5 mm long; pistil 1.2-2.2 mm long, stigma slightly bilobed. *Fruiting* pedicel 3-23 × 0.4-2.5 mm; young fruits green, dark red when mature, ovoid, 8-17.5 × 6-15 mm, surface smooth, covered with white dots, apex bluntly pointed to rostellate; dry pericarp 0.2-1.6 mm thick; endocarp woody; seed 6-14 × 4-10 mm.

**Distribution, ecology and phenology** *Noronhia linocerioides* occurs in low- to high-elevation humid forests in the east, from Daraina to Fort-Dauphin, and in the Sambirano region in the northwest (Fig. 27). It produces flowers and fruits all year.

**Conservation status** *Noronhia linocerioides* is widely distributed, ranging throughout almost the entire eastern part of Madagascar, the northeast, and the Sambirano region. Ninety-one collections representing 73 localities were available for analysis. With an EOO of 193,559 km<sup>2</sup>, an AOO estimated at 268 km<sup>2</sup> but that is certainly much larger, and 50 subpopulations representing 43 locations, of which 15 occur within protected areas (Analalava, Anjanaharibe-Sud, Lokobe, Loky-Manambato, Makira, Makirovana, Mandena, Manombo, Masoala, Ranomafana, Ste Luce, Tsaratanana, Tsaratanana-Ambohimirahavavy-Corridor Marojejy, Tsitongambarika, and Zahamena), *N. linocerioides* is assigned a preliminary status of "Least Concern".

**Notes** *Noronhia linocerioides* can be recognized by its reddish petioles, chartaceous leaf blades, and short-tubed, yellow flowers. It differs from *N. brevītuba* by the shape of its leaves and flowers and the apex of its fruits, as discussed under that species. Most specimens placed in *Olea ambrensis* H. Perrier by GREEN (2002) fall within the range of morphological variation of *N. linocerioides*. Among these, Schatz 3605 (erroneously cited as Schatz 3405 in GREEN (2002), which is actually a collection of *Sideroxylum betsimisarakum* Lecomte) is phylogenetically related to other specimens clearly belonging to *Noronhia. linocerioides* (HONG-WA & BESNARD, 2013, 2014). Thus, most specimens formerly recognized as *Olea ambrensis* are transferred here to *Noronhia linocerioides*, whereas others were also embedded within another clade comprising species of *Noronhia* (HONG-WA & BESNARD, 2013, 2014). Their placement is addressed below under *N. olearia*.

**Additional specimens examined**

**MADAGASCAR. Prov. Antsiranana:** Vinanivao, Masoala PN, 15°41'33"S, 50°13'30"E, 12-100 m, 15.IX.1996, Bernard 323 (K, MO, P, TAN); Anjanaharibe-Sud RS, 10 km SW of Befingotra, 14°45'S 49°29'E, 1100-1300 m, 7.IX.1997, Birkinshaw *et al.* 467 (MO, P, TAN); Antalaha, between Sahantaha and Andongozabe, 15°02'S 50°20'E, 10 m, 20.IX.1997, Birkinshaw 492 (MO, P, TAN); Ambatobiribiry, [14°11'S 50°05'E], 50-345 m, 29-30.XI.1950, Humbert & Capuron 24420 (G, MO, P); Masoala PN, Sahamalaza, Vinanivao, 15°35'S 50°25'E, 0 m, 18.IX.1994, Rahajasoia *et al.* 408 (K, MO, TAN); Masoala PN, Andrombazaha, 15°16'S 50°29'E, 4.X.1994, Rahajasoia *et al.* 751 (K, MO, P, TAN); Marojejy RNI, 14°02'30"S 49°48'20"E, 805 m, 8-16.VII.1994, Rasoavimbahoaka 328 (K, MO, P, TAN); Marotolana, à 7 km à l'E de Beangona-Ambevy, 14°01'54"S 48°47'01"E, 700-1300 m, 26.XI.2000, Ratoivoson 347 (MO, P, TAN); Andapa, Bealampona, Anjanaharibe-Sud RS, 14°45'03"S 49°30'03"E, 875 m, 18.X.1994, Ravelonarivo *et al.* 394 (G, K, MO, P, TAN); Sambava, Anjangoveratra, Antanandava, forêt de Bevagnana, 14°10'38"S 49°57'11"E, 417 m, 5.II.2011, Ravelonarivo *et al.* 3606 (MO, P, TAN); Antalaha, Ambohitralanana, Sahafary, 15°17'27"S, 50°22'39"E, 29.IX.1997, Ravololonanahary & Zera 101 (G, K, MO, P, TAN); Nosy-Be, Lokobe RNI, [13°24'S 48°19'E], 20.V.1952, Réserves Naturelles 4323 (P, TAN); Andapa, Doany, Andranovola, [14°22'S 49°31'E], 0-400 m, 31.X.1967, Service Forestier 26451 (MO, P, TEF). **Prov. Fianarantsoa:** Manombo RS, 23°00'S 47°42'E, 5.III.2009, Hong-Wa *et al.* 613 (MO, P, TAN); Ranomafana PN, Parcelle 1, S of Ambohimiera, 21°04'S 47°29'E, 880-1100 m, 15-17.IX.1992, Malcomber *et al.* 1561 (MO, P, TAN); Ifanadiana, [21°18'S 47°37'E], 1000 m, 10.XII.1954, Service Forestier 13818 (P, TEF). **Prov. Mahajanga:** Matsoandakana, Andasinanantsomanga Amparihy, 14°55'34"S 49°24'59"E, 1155 m, 24.II.2008, Bernard 929 (G, MO, P, TAN). **Prov. Toamasina:** Maroantsetra, Anjahanana, Ambanizana, 15°37'02"S 49°58'10"E, 20 m, 8.VI.2002, Antilahimena 1064 (G, MO, P); Tampolo STF, 17°16'S 49°25'E, 0-10 m, 15.IV.1997, Birkinshaw *et al.* 421A (G, MO, P); Toamasina, [18°49'S 49°08'E], 3-5 m, 13.X.1946, Cours 2994 (G, MO, P); Maroantsetra, Hiaraka, 15°30'S 49°55'E, 100 m, 11.X.1986, Lowry *et al.* 4070 (MO, P, TAN); Masoala Peninsula, Ambanizana, 15°38'S 49°58'E, 5-10 m,

10.II.1999, *McPherson et al.* 17546 (G, K, MO, TAN); Soanierana-Ivongo, Manompana, forêt d'Andakibe, 16°47'06"S 49°44'18"E, 1.XI.2008, *Nikolov* 1780 (MO, P); Ambila-Lemaitso, 18°49'S 49°08'E, 10 m, 3.VII.1995, *Razafimandimbison* 172 (G, K, MO, P, TAN); 5-12 km SW of Maroantsetra, 15°30'S 49°39'E, 10 m, 28.XI.1987, *Schatz* 1796 (MO, P, TAN); Fénérive-Est, Ambodimanga, Tampolo STF, 17°16'52"S 49°24'44"E, 10 m, 25.XI.1994, *Schatz* 3605 (G, K, MO); Manakambahiny Est, Ranomainty, près de Nonokambo, [17°45'S 48°45'E], 24.XII.1967, *Service Forestier* 26558 (MO, P, TEF); Tampolo STF, 17°17'S 49°23'E, 8.XI.1981, *Service Forestier* 32269 (TEF); Ampasin' Onibe, Mahatsara STF, 17°38'S 49°29'E, 19.X.1990, *Service Forestier* 34124 (MO, TEF); 4 km S of Vatomandry, 18°53'49"S 49°07'43"E, 14 m, 10.I.2006, *Tosh et al.* 69 (BR, K, MO, P, TAN). **Prov. Toliara:** Fort-Dauphin, Lakandava, 24°58'13"S 46°57'47"E, 1.X.2000, *Rabevohitra et al.* 3723 (G, MO); Mahatalaky, Sainte Luce, 24°08'04"S 47°16'38"E, 5 m, 9.XI.2006, *Ramison et al.* 28 (G, MO, P, TEF).