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# *Teclea simplicifolia* Engl.

## *Vepris danielii* (Pic. Serm.) Mziray

### *Vepris nobilis* Delile.

#### RUTACEAE

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#### Synonyms

*Teclea simplicifolia* Engl.: *Teclea salicifolia* Engl.; *Teclea simplicifolia* (Engl.) Engl.; *Teclea viridis* I. Verd.; *Toddalia eugenifolia* Engl.

*Vepris danielii* (Pic. Serm.) Mziray: *Diphasia danielii* Pic.Serm.

*Vepris nobilis* Delile.: *Aspidostigma acuminatum* Hochst.; *Cranzia nobilis* (Delile) Kuntze; *Teclea diversifolia* Lanza; *Teclea nobilis* Delile; *Toddalia nobilis* (Delile) Hook. f. ex Oliv.

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#### Local Names

***Teclea simplicifolia*:** **Kikuyu:** Munderendu; **Borana:** Mike; **Digo:** Muchimi wa tsakani; **Ndorobo:** Ikirai; **Kipsigis / Ndorobo / Marakwert:** Kuriot; **Meru:** Muretu; **Tugen:** Kurionde; **Turkana:** Edapalakuyen; **Maa:** Oleglai; **Samburu:** Lgelai, Ngolei orok, Nkilaiorok (Beentje 1994; Gachati 1989; Kokwaro 2009).

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***Vepris dainellii*: Kikuyu:** Munderendu (Beentje 1994; Gachati 1989; Kokwaro 2009). ***Vepris nobilis*: Kikuyu:** Munderendu; **Teso:** Ekudep; **Kipsigis / Ndorobo:** Kuriot, Kurisyot; **Luhya:** Mumutare, Mutaro, Muzo; **Luganda:** Nzo; **Luo:** Midat, Odar; **Maa:** Ol-Gelai; **Marakwet:** Koorea, Lugumwa; **Pokot:** Kurion; **Turkana:** Ekodek (Beentje 1994; Gachati 1989; Kokwaro 2009).

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## Botany and Ecology

***Vepris dainellii*:** Endemic to southern Ethiopia, a small understorey tree up to 15 m tall in moist montane forest. Differs from *Vepris nobilis* by its opposite leaves and 2-lobed fruit. The tough wood is used for furniture and agricultural implements, and as firewood. The fruit is edible (Kokwaro 1982). An important component of semi-deciduous Afromontane forests in southern Ethiopia (Bussmann 1997, 2002a, b) (Figs. 1, 2, 3, and 4).

***Vepris nobilis*:** Evergreen shrub or tree (3–)5–12 m high or much taller in rain-forest; bark smooth and grey; branchlets glabrous. Leaves trifoliolate, occasionally 2- or 1-foliolate; petiole 1.5–6(–8) cm long, terete or sometimes slightly grooved at the apex, usually glabrous; leaflets subsessile or with a petiolule up to 10 mm long, elliptic to oblong-elliptic, 5–15(–18) cm long, 1.5–4(–5.5) cm broad, acute to acuminate at the apex, narrowly cuneate at the base, entire, glabrous except sometimes puberulous on the midrib; lateral nerves numerous. Inflorescence of terminal and axillary panicles 4–15(–21) cm long, glabrous. Flowers polygamous. Bisexual flowers with 4(–5) stamens. Female flower with 4 or 5 staminodes 0.5–1.2 mm long (variable in length on the same flower); ovary subglobose, 1–1.4 mm in diameter, glabrous, unilocular, 2-ovulate; style up to 0.5 mm long; stigma disk-shaped and peltate, 1 mm. in diameter. Male flowers with 4(–5) stamens, 3–5.5 mm long (variable in length on the same flower); anthers basifixd; rudimentary ovary slender

**Fig. 1** *Vepris dainellii*  
(Rutaceae), Bale Mountains  
National Park, Demaro Forest,  
Ethiopia. (Photo R.W.,  
Bussmann)



**Fig. 2** *Vepris dainellii* (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R.W., Bussmann)



**Fig. 3** *Vepris dainellii* (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R.W., Bussmann)

and glabrous. Sepals 4, united into a cupuliform calyx 0.6–0.8 mm long; lobes small, ovate, ciliate. Petals 4(–5), narrowly elliptic, 3.5–4 mm long, 1.5–1.7 mm broad. Male flowers with 4(–5) stamens, 3–5.5 mm long (variable in length on the same flower); anthers basifixd; rudimentary ovary slender and glabrous. Female flower with 4 or 5 staminodes 0.5–1.2 mm long (variable in length on the same flower); ovary subglobose, 1–1.4 mm in diameter, glabrous, unilocular, 2-ovulate; style up to 0.5 mm long; stigma disk-shaped and peltate, 1 mm in diameter. Bisexual flowers with 4(–5) stamens. Fruit obovoid, 6–8 mm long, 5–6 mm in diameter, red, glabrous, barely foveolate, wrinkled when dry, 1-seeded. Seed ovoid, 5.5–6 mm long. Evergreen forest,

**Fig. 4** *Vepris dainellii* (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R.W., Bussmann)



**Fig. 5** *Vepris nobilis* (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R.W., Bussmann)



**Fig. 6** *Vepris nobilis* (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R:W., Bussmann)



**Fig. 7** *Vepris nobilis* (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R:W., Bussmann)



riverine forest and woodland; 900–2600 m. (Kokwaro 1982). An important component of semideciduous Afromontane forests (Bussmann 2002a, b) (Figs. 5, 6, 7, and 8).

***Vepris simplicifolia*:** A small 1-foliolate tree up to 10(–20) m tall, occurring in Ethiopia, Kenya and Tanzania (Beentje 1994). An important component of semi-deciduous Afromontane forests (Bussmann 2002a, b) (Figs. 9 and 10).

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### Local Medicinal Uses

***Vepris dainellii*:** The roots are crushed and applied topically to boils (Giday et al. 2010).

**Fig. 8** *Vepris nobilis* (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R.W., Bussmann)



**Fig. 9** *Vepris* sp. (Rutaceae), Bale Mountains National Park, Demaro Forest, Ethiopia. (Photo R. W., Bussmann)

***Vepris nobilis*:** The leaves are used in a vapor bath to treat fever, and leaf and root decoctions are drunk to treat pneumonia, rheumatism, and itching. The roots serve as an anthelmintic and for treatment of pneumonia. Pounded root bark is applied to syphilitic ulcers, whereas the stem bark is taken as an expectorant. Bark and leaves are used as an analgesic. Roots and twigs are used as toothbrushes (Beentje 1994; Gachati 1989; Kokwaro 2009). A decoction of roots or leaves with honey is used for pneumonia, rheumatism, arthritis, measles, and externally for scabies (Kokwaro 2009). Used as toothbrush (Bussmann et al. 2006). Used to treat malaria and to make strengthening soups (Bussmann 2006). Used also as febrifuge (Mohagheghzadeh and Faridi 2006). Also used for colds (Gafna et al. 2017).

**Fig. 10** *Vepris*  
sp. (Rutaceae), Bale  
Mountains National Park,  
Demaro Forest, Ethiopia.  
(Photo R.W., Bussmann)



***Vepris simplicifolia*:** In traditional medicine, a bark decoction is drunk to treat chest complaints, malaria, and hepatitis, and a root decoction to treat stomach-ache, backache, leprosy, gonorrhea, and brucellosis. Leaves and twigs are used for treating pleurisy. A leaf decoction is taken against pneumonia, leaf ash is applied externally against leprosy, and fruits are chewed to relieve toothache. Twigs are used as toothbrushes (Beentje 1994; Gachati 1989; Kokwaro 2009). Used to treat malaria and to make strengthening soups, as well as toothbrush (Bussmann 2006). To treat pneumonia, allergies and gonorrhea (Muthee et al. 2011), for stomachache, diarrhea and hepatitis, back ache, joint pains, and general health (Nankaya et al. 2019, 2020). ***Vepris ambody*** is applied to wounds and used for abdominal pain (Rabearivony et al. 2015). ***Vepris boviniana*** is used for epilepsy (Randrianarivony et al. 2016a, b, c), ***Vepris unifoliolata*** is used for postpartum hemorrhages and colic (Randrianarivony et al. 2016c).

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## Local Food Uses

***Vepris dainellii*:** The fruit is edible (Beentje 1994; Gachati 1989; Kokwaro 2009).  
***Vepris nobilis*:** The fruits are edible (Beentje 1994; Gachati 1989; Kokwaro 2009).

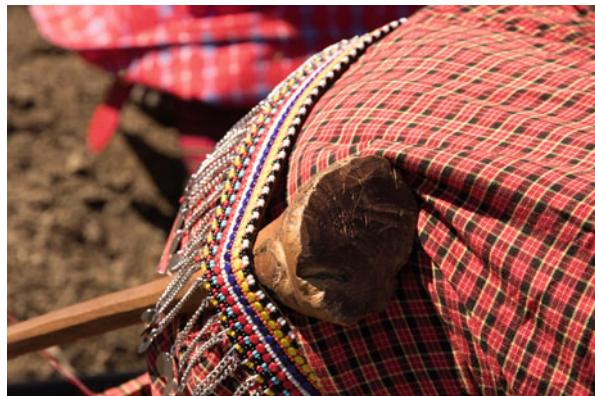
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## Local Handicraft and Other Uses

***Vepris dainellii*:** The tough wood is used for furniture and agricultural implements, and as firewood (Beentje 1994; Bekalo et al. 2009; Gachati 1989; Kokwaro 2009; Bussmann et al. 2011).

***Vepris nobilis*:** The wood is used for poles and posts in house building, fences, tool handles, and utensils, e.g., bows, walking sticks, clubs, spear shafts, bows, and

**Fig. 11** *Vepris nobilis* (Rutaceae), Maasai war club (rungu), Selenani camp, Maasai Mara, Kenya. (Photo R.W., Bussmann)



spoons. The wood is excellent for turning and inlay work, and is also suitable for heavy construction, flooring, joinery, shipbuilding, vehicle bodies, furniture, cabinet work, mine props, sporting goods, agricultural implements, toys, novelties, and vats. It is used as firewood and for charcoal production. The flowers are a source of nectar for honeybees. The tree is occasionally planted for improving the soil by its leaf litter, and as a shade and amenity tree (Beentje 1994; Gachati 1989; Kokwaro 2009). Used to make tools and ploughs (Bussmann et al. 2011). Excellent for making rungus and sticks (Bussmann et al. 2006). Eaten by livestock, for the construction of fences, as firewood, and excellent to make rungus (Bussmann 2006) (Fig. 11).

***Vepris simplicifolia***: The wood is very similar to that of ***Vepris nobilis*** and used for similar purposes (Beentje 1994; Gachati 1989; Kokwaro 2009). Used as firewood (Bussmann et al. 2011; Tian 2017). Eaten by livestock, for the construction of fences, as firewood, and excellent to make rungus (Bussmann 2006).

***Vepris verdooriana*** is used as fishing poison (Neuwinger 2004). ***Vepris macrophylla*** is used for construction (Rakotoarivelo et al. 2013). ***Vepris boviniana*** and ***Vepris unifoliolata*** are used for protection spells, to destroy spells that prevent pregnancy, and to improve agricultural production (Randrianarivony et al. 2016a, b, c).

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