

Ackama nubicola

COMMON NAME

Turoa Onamata

SYNONYMS

None

FAMILY

Cunoniaceae

AUTHORITY

Ackama nubicola de Lange

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 32

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Critical | Qualifiers: CD, OL, RF

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Critical | Qualifiers: CD, OL, RF

2009 | Threatened – Nationally Critical | Qualifiers: CD, RF, OL

2004 | Threatened – Nationally Endangered

BRIEF DESCRIPTION

Rare small tree occurring above 500 m in the Waima Forest. Leaves with 4–8 opposite pairs of toothed leaflets and a terminal leaflet and young leaves protected by an obvious oval cream scale. Flowers in dense sprays of pinkish-green flowers.

DISTRIBUTION

Endemic. North Island, South Hokianga, Waima Forest.

HABITAT

Apparently restricted to secondary regrowth within cloud forest at elevations above 500 m. At present this species is only known from one site where it grows within valley heads, along cliff margins, at the base of rock outcrops and at the interface between forest and rough pasture. Typically the species grows in dense stands of 5–20 apparently even-aged trees. Most seedlings and juveniles have been found as low epiphytes on tree ferns. However, because the sole habitat has been until recently accessible to cattle, it is more likely that the seedlings observed have been those that survived because they were out of reach of these animals.



Waima Forest and Hauturu Trig. Photographer: Peter J. de Lange, Date taken: 01/02/2001, Licence: CC BY-NC.



Waima Forest, Framptons. Photographer: Peter J. de Lange, Date taken: 01/02/2001, Licence: CC BY-NC.

DETAILED DESCRIPTION

Small tree 5-15 m tall, multi trunked and often suckering from base. Crown spreading, canopy foliage silvery-grey when viewed from a distance. Bark pale greyish white, streaked graphite grey, firm. Branches stout, sparse, erect. Stipules interpetiolar, long persistent, 14 × 18 mm, butter-yellow or cream, basally flushed purple, orbicular, fleshy, margin entire. Petioles 35–40 mm long, pulvinate. Leaves compound, leathery, 140–300 × 50–140 mm, initially wine-red or pink, rather sticky, maturing dark green above, somewhat silvery green below, leaflets (2-)4(-11) pairs, petiolules 10-20 mm, dark maroon; leaflets 30–150 × 35–100 mm, with middle pairs larger than all but the terminal leaflet, basal leaflet pair truncate, other pairs except terminal leaflet truncate or oblique; terminal leaflet cuneate, up to 100 × 50 mm, margins serrated, leaf domatia inconspicuous, vestigial, of the hair tuft type. Inflorescences axillary, paniculate 80–100 mm long, suberect to pendent. Flowers perfect, on short pedicels. Calyx (4-)5 merous, valvate; 0.8 mm long, sepals oblong-deltoid, fused, sparsely covered in appressed hairs. Petals (4-)5, off white to pink, 0.8 × 0.2 mm. Stamens 10, white to pale pink; anthers 0.2 mm diam., cream. Ovary ovoid 0.8 mm diam., covered in appressed hairs, the two carpels free almost to base. Styles 0.8 mm long, pale pink, falcate. Stigmas 0.2–0.4 mm, crimson, punctate. Fruit a broadly cylindrical to globose capsule 2.4–3 × 2–2.7 mm, initially cream-coloured drying honey-brown or dark brown. Seeds 4(-6) per capsule, reddish brown, 0.9 × 0.4 mm, ovoid.

SIMILAR TAXA

Makamaka (*Ackama rosifolia*) though similar is a smaller tree than *A. nubicola*, with smaller, narrower leaves which usually bear more leaflets. *Ackama rosifolia* has conspicuous hair-tuft pocket domatia located at the vein/midrib junction on the leaflet underside, while *A. nubicola* either lacks domatia completely or has very inconspicuous tufts of hair. The stipules of *A. rosifolia* are smaller than those of *A. nubicola*, green, deciduous and obovate to lanceolate, with prominent apical teeth, rather than creamy yellow, orbicular, entire and long persistent. Flowers are produced by *A. rosifolia* in spring and by *A. nubicola* in late summer to early autumn. Lastly, the maturing fruits of *A. rosifolia* are pink or carmine rather than cream.

FLOWERING

Appears to be February–March (flowering has been observed twice since it was discovered in 2000)

FLOWER COLOURS

Red/Pink, White

FRUITING

Appears to be March–July, though exact time uncertain (fruit has been observed three times since the species was discovered in 2000)

LIFE CYCLE

Hairy carpels dispersed by wind (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Softwood to semi hardwood cuttings taken in February. Although cuttings are easy to strike, and plants initially grow rapidly, they have proved difficult to maintain. This species seems to require cool conditions and ample moisture. It cannot tolerate drought and dislikes humidity. So far attempts to cultivate to it have met with varying degrees of success. It has proved to be rather fickle.

THREATS

Possums are the main threat as they severely defoliate the trees, thereby preventing flowering and fruiting.

ETYMOLOGY

ackama: Formed from its Maori name - maka-maka

nubicola: Cloud dweller

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (27 December 2002). Description adapted from de Lange et al. (2002).

REFERENCES AND FURTHER READING

de Lange, P.J.; Gardner, R.O.; Riddell, K.A. 2002: *Ackama nubicola* (Cunoniaceae) a new species from western Northland, North Island, New Zealand. *New Zealand Journal of Botany* 40(4): 525–534.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009: Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11(4): 285–309.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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