

Genus *Paralethe* van Son, 1955 Bush Beauty

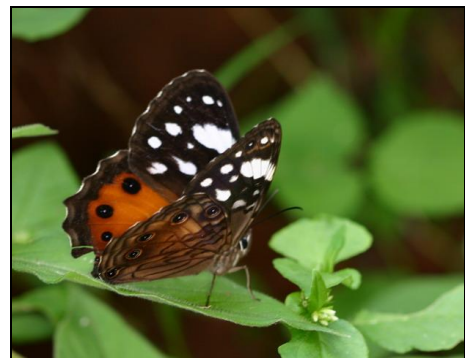
Transvaal Museum Memoirs No. 8: 51 (1-166).

Type-species: *Satyrus dendrophilus* Trimen, by original designation.

The genus *Paralethe* belongs to the Family Nymphalidae Rafinesque, 1815; Subfamily Satyrinae Boisduval, 1833; Tribe Dirini Verity, 1953. The other genera in the Tribe Dirini in the Afrotropical Region are *Aeropetes*, *Tarsocera*, *Torynesis*, *Dira*, *Serradinga* and *Dingana*.

Paralethe (**Bush Beauty**) is an Afrotropical genus with a single species (comprising four subspecies), from South Africa and Swaziland.

**Paralethe dendrophilus* (Trimen, 1862)# Bush Beauty



Left: Karkloof Bush Beauty (*Paralethe dendrophilus albina*) male, Mbotyi, Eastern Cape Province. Image courtesy Steve Woodhall.
Right: Transvaal Bush Beauty (*Paralente dendrophilus junodi*) male, Woodbush, Limpopo Province. Image courtesy Raimund Schutte.

Satyrus dendrophilus Trimen, 1862. *Transactions of the Entomological Society of London* (3) 1: 399 (398-406).

Debis dendrophilus (Trimen, 1862). Trimen, 1866a.

Lethe dendrophilus (Trimen, 1862). Trimen & Bowker, 1887a.

Meneris dendrophilus Trimen, 1862. Swanepoel, 1953a.

Paralethe dendrophilus (Trimen, 1862). Van Son, 1955.

Paralethe dendrophilus (Trimen, 1862). Dickson & Kroon, 1978.

Paralethe dendrophilus (Trimen, 1862). Pringle *et al.*, 1994: 53.



Paralethe dendrophilus dendrophilus. Male (Wingspan 47 mm). Left – upperside; right – underside.
Khologha Forest, Eastern Cape Province, South Africa. 29 December 2008. J. Dobson.
Images M.C. Williams ex J. Dobson Collection.

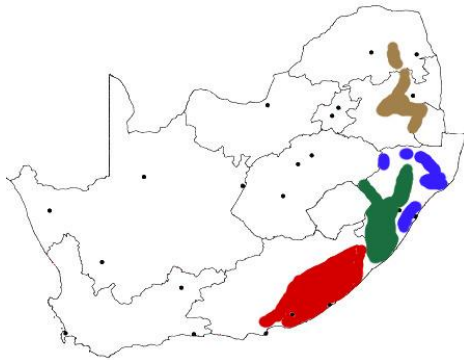


Paralethe dendrophilus dendrophilus (intermediate between ssp. *dendrophilus* and *albina*).
Male (Wingspan 60 mm). Left – upperside; right – underside.
Cwebe Nature Reserve, Eastern Cape Province, South Africa. 7 May 2014. M. Williams.
Images M.C. Williams ex Williams Collection.



Paralethe dendrophilus dendrophilus (intermediate between ssp. *dendrophilus* and *albina*).
Female (Wingspan 65 mm). Left – upperside; right – underside.
Cwebe Nature Reserve, Eastern Cape Province, South Africa. 5 May 2014. M. Williams.
Images M.C. Williams ex Williams Collection.

Alternative common name: Bush Beauty; Bosprag (ssp. *dendrophilus*); Pondo Bosprag (ssp. *albina*); Oostelike Reënwood Bosprag (ssp. *indosa*); Noordelike Reënwood Bosprag (ssp. *junodi*) (Afrikaans).
Type locality: [South Africa]: “Frankfort”.



Distribution: South Africa –
Eastern Cape Province [ssp. *dendrophilus* – red]

KwaZulu-Natal, Eastern Cape Province [ssp. *albina* - green]

KwaZulu-Natal [ssp. *indosa*]

Mpumalanga, Limpopo Province [ssp. *junodi*]

Distribution: South Africa, Swaziland.

Habitat: Montane forest and temperate coastal forest.

Habits: Keeps to the shade of forest and forest edges, frequently settling on the bark of tree trunks. Both sexes feed from fermenting sap exuding from holes in trees and are also attracted to fermenting fruit (Pringle *et al.*, 1994).

Flight period: Late December to May (Pringle *et al.*, 1994).

Early stages:

Clark, 1940: 53 (*J. Ent. Soc. Sth. Afr.* 3: 53) (subspecies *dendrophilus* and subspecies *junodi*).

Clark, *in* Van Son, 1955: 53 (subspecies *dendrophilus*).

Egg – laid on grass; 1 mm diameter by 1 mm high; pure white, turning yellowish and darkening to pale brown as larva develops inside; surface with very fine, almost invisible, hexagonal tracery; egg stage 16-19 days. **First instar larva** – pale whitish yellow with single dorsal and double lateral pink stripes; upper lateral stripe broader than lower stripe; each segment with three primary setae above spiracle and two below it; seta 1 longest, 3 on broad pink stripe, 4 as long as 3, of those below spiracle the posterior is longest; terminal segment with two short processes; head very pale ochraceous, with 12 primary setae on epicranium, six of which are long, curved, barbed and surrounded at base by fine network on a dark background; larva lies concealed among partially dried grass and feeds on young shoots; grows from 2-4 mm in about 8 days. **Second instar larva** – very pale brownish pink; dorsal stripe light brown with second pink stripe on each side; formerly broad pink stripe now light brown and diffuse on upper edge; another pink stripe developed below spiracle; prolegs pale green with small oblique pink stripe; setae 1, 3 and 4 shorter, several still shorter secondary setae have appeared; number of setae below spiracle much increased; anal processes a little longer; head pale ochreous; frontal above clypeus darker; mandibles black; primary setae surrounded at base by five small circular depressions; network and barbs have disappeared but base of each seta knob-like; grows to 6,5 mm in nine days. **Third instar larva** – pinkish brown; dorsal stripe pink; other stripes tend to break up into short oblique fasciae; more secondary setae have developed, each on bulbous base; anal processes somewhat longer; grows to 8 mm in 12 days. **Fourth instar larva** – reddish brown; distinct pattern on back, formed by oblique fuscous marks on each segment, edged on outer edge by white; two lateral oblique greyish blue fasciae are formed on each segment; grows to 13,5 mm in 15-16 days. **Fifth instar larva** – as for previous instar but pattern broader and better defined; setae more numerous, shorter and of more even length; head same colour as body; grows to 23,5 mm in 15-16 days. **Sixth (final) instar larva** – paler than previous instar; pattern on dorsum less well defined due to obliteration of white colour; setae very numerous, short and situated on a bulbous base; head densely setose, setae with a fluted bulbous base; heavily pitted between setae to halfway down; spiracles oval, with central portion filled up with what appear to be overlapping scales; portion below lateral line mostly blackened below white lateral line and larva thicker in middle; grows to 38-40 mm in about 34 days; larvae vary somewhat in colour, especially in final instar, extreme form being pale drab yellow with grey markings; cuticle densely covered with conical fluted moles, which vary in colour, and are mainly responsible for colour patterns; larvae mostly feed at night, hiding near base of grass by day where colour of larva harmonizes with mould and dry grass; movements very sluggish and deliberate; before pupating, larva decreases in size, spins mat of dark yellowish brown silk, and attaches anal claspers to mat; remains motionless for a day before pupating. **Pupa** – brick-red; suspended only by cremastral hooks; three days before eclosing becomes darker until almost black; pupal stage 36 days.



Early stages of *Paralethe dendrophilus*. Larva.
Image courtesy Steve Woodhall.

Larval food:

Ehrharta erecta Lam. (Poaceae) [Clark, *in* Van Son, 1955: 54; subspecies *dendrophilus* and *junodi*].

Panicum deustum Thunb. (Poaceae) [Clark, *in* Van Son, 1955: 54; subspecies *dendrophilus* and *junodi*].

(Suspected to be) *Hypoestes aristata* (Vahl) Sol. ex Roem. & Schult. (Acanthaceae) [Bowker, *in* Trimen & Bowker, 1887, Vol. 1: 123; Pinetown, KwaZulu-Natal (subspecies *indosa*); almost certainly erroneous].

Paralethe dendrophilus dendrophilus (Trimen, 1862)#

Bush Beauty

Satyrus dendrophilus Trimen, 1862. *Transactions of the Entomological Society of London* (3) 1: 399 (398-406).

Meneris dendrophilus (Trimen, 1862). Swanepoel, 1953.

Paralethe dendrophilus dendrophilus (Trimen, 1862). Van Son, 1955.

Paralethe dendrophilus dendrophilus (Trimen, 1862). Dickson & Kroon, 1978.

Paralethe dendrophilus dendrophilus (Trimen, 1862). Pringle *et al.*, 1994: 54.



Paralethe dendrophilus dendrophilus. Male (Wingspan 47 mm). Left – upperside; right – underside.

Khologha Forest, Eastern Cape Province, South Africa. 29 December 2008. J. Dobson.

Images M.C. Williams ex J. Dobson Collection.



Paralethe dendrophilus dendrophilus (intermediate between ssp. *dendrophilus* and *albina*).
 Male (Wingspan 60 mm). Left – upperside; right – underside.
 Cwebe Nature Reserve, Eastern Cape Province, South Africa. 7 May 2014. M. Williams.
 Images M.C. Williams ex Williams Collection.



Paralethe dendrophilus dendrophilus (intermediate between ssp. *dendrophilus* and *albina*).
 Female (Wingspan 65 mm). Left – upperside; right – underside.
 Cwebe Nature Reserve, Eastern Cape Province, South Africa. 5 May 2014. M. Williams.
 Images M.C. Williams ex Williams Collection.

Type locality: [South Africa]: “Frankfort”.

Distribution: South Africa (Eastern Cape Province).

Specific localities:

Eastern Cape Province – Frankfort (TL); Stutterheim (Swanepoel, 1953); Zuurberg (Swanepoel, 1953); King William’s Town (Swanepoel, 1953); Amabele (Swanepoel, 1953); East London (Swanepoel, 1953); Katberg (Swanepoel, 1953); Hogsback (Swanepoel, 1953); Grahamstown (Swanepoel, 1953); Tsomo River (Swanepoel, 1953); Bashee River Mouth (Pringle *et al.*, 1994); Alexandria (Mecenero *et al.*, 2013); Mt Frere (Mecenero *et al.*, 2013).

Paralethe dendrophilus albina van Son, 1955#
Karkloof Bush Beauty

Paralethe dendrophilus albina van Son, 1955. *Transvaal Museum Memoirs* No. 8: 54 (1-166).

Paralethe dendrophilus albina Van Son, 1955. Dickson & Kroon, 1978.

Paralethe dendrophilus albina Van Son, 1955. Pringle *et al.*, 1994: 54.



Paralethe dendrophilus albina. Male (Wingspan 48 mm). Left – upperside; right – underside.
Howick, Kwa Zulu-Natal, South Africa. 12 February 2008. J. Dobson.
Images M.C. Williams ex J. Dobson Collection.



Paralethe dendrophilus albina. Female (Wingspan 53 mm). Left – upperside; right – underside.
Balgowan, KwaZulu-Natal, South Africa. 1 February 2003. J. Dobson.
Images M.C. Williams ex J. Dobson Collection.

Type locality: South Africa: “Port St. Johns, Pondoland”.

Distribution: South Africa (KwaZulu-Natal, Eastern Cape Province).

Specific localities:

KwaZulu-Natal – Pietermaritzburg (Swanepoel, 1953); Balgowan (Swanepoel, 1953); (Pringle *et al.*, 1994); Karkloof (Pringle *et al.*, 1994); Kranskop (Pringle *et al.*, 1994); Vryheid (Mecenero *et al.*, 2013).

Eastern Cape Province – Port St Johns (TL; Swanepoel, 1953); Embotyi Forest (Pringle *et al.*, 1994); Butterworth (Mecenero *et al.*, 2013).

Note: It is probable that the populations in the KwaZulu-Natal midlands (form *alticola*) represent a distinct subspecies (Pringle *et al.*, 1994: 54).

alticola van Son, 1955 (as f. of *Paralethe dendrophilus albina*). *Transvaal Museum Memoirs* No. 8: 55 (1-166). South Africa: “Balgowan, Natal”.

***Paralethe dendrophilus indosa* (Trimen, 1879)#**
Lowland Bush Beauty

Debis indosa Trimen, 1879. *Transactions of the Entomological Society of London* **1879**: 324 (323-346).

Lethe indosa (Trimen, 1879). Trimen & Bowker, 1887a.

Paralethe dendrophilus indosa (Trimen, 1879). Van Son, 1955.

Paralethe dendrophilus indosa Trimen, 1879. Dickson & Kroon, 1978.

Paralethe dendrophilus indosa (Trimen, 1879). Pringle *et al.*, 1994: 54.



Paralethe dendrophilus indosa. Male (Wingspan 56 mm). Left – upperside; right – underside.
Eshowe, KwaZulu-Natal, South Africa. 13 April 1974. M. Williams.
Images M.C. Williams ex J. Dobson Collection.



Paralethe dendrophilus indosa. Female (Wingspan 61 mm). Left – upperside; right – underside.
Oribi Gorge, KwaZulu-Natal, South Africa. 28 April 2005. J. Dobson.
Images M.C. Williams ex J. Dobson Collection.

Type locality: [South Africa]: “Tunjumbili, Pinetown, Illovo”.

Distribution: South Africa (KwaZulu-Natal).

Specific localities:

KwaZulu-Natal – Tunjumbili (TL); Pinetown (Trimen, 1879); Illovo (Trimen, 1879); Durban (Swanepoel, 1953); Eshowe (Swanepoel, 1953); Kloof (Pringle *et al.*, 1994); Ngoye (Pringle *et al.*, 1994); below the Karkloof Falls (Pringle *et al.*, 1994); South Coast (Pringle *et al.*, 1994); Port Edward (Mecenero *et al.*, 2013); Paulpietersburg (Mecenero *et al.*, 2013).

albomaculatus Staudinger, 1887 *in* Staudinger & Schatz, 1884-8 (as var. of *Lethe dendrophilus*). *Exotischer Schmetterlinge* 1: 222 (333 pp.). Bayern. South Africa: “Natal”.

***Paralethe dendrophilus junodi* (van Son, 1935)#**
Transvaal Bush Beauty

Meneris dendrophilus junodi van Son, 1935. *Annals of the Transvaal Museum* 15: 485 (485-489).

Paralethe dendrophilus junodi (van Son, 1935). Van Son, 1955.

Paralethe dendrophilus junodi Van Son, 1935. Dickson & Kroon, 1978.

Paralethe dendrophilus junodi Van Son, 1935. Pringle *et al.*, 1994: 54.



Paralethe dendrophilus junodi. Male (Wingspan 58 mm). Left – upperside; right – underside.
 Marieps Kop, Mpumalanga Province, South Africa. 19 March 2006. J. Dobson.
 Images M.C. Williams ex J. Dobson Collection.



Paralethe dendrophilus junodi. Female. Left – upperside; right – underside.
 Woodbush, Limpopo Province, South Africa. 2 April, 1968. W. Henning.
 Images M.C. Williams ex Henning Collection.

Type locality: South Africa: “Malelane, Transvaal”.

Distribution: South Africa (Limpopo Province, Mpumalanga), Swaziland.

Specific localities:

Limpopo Province – Lekgalameetse Nature Reserve (“Malta Forest”) (Swanepoel, 1953); Woodbush (Swanepoel, 1953); Houtbosdorp (Swanepoel, 1953).

Mpumalanga – Malelane (TL); Sabie (Pringle *et al.*, 1994); Mariepskop (Pringle *et al.*, 1994); Buffelskloof Nature Reserve (Williams); Amsterdam (Mecenero *et al.*, 2013).

Swaziland – Havelock Mine (Pringle *et al.*, 1994).