

**Family:** *Lamiaceae*

**Taxon:** *Plectranthus neochilus*

**Synonym:** *Coleus pentheri* Gürke

*Coleus schinzii* Gürke

*Coleus carnosus* A. Chev.

*Coleus neochilus* (Schltr.) Codd

**Common Name** spur flower

Lobster Flower

poor man's lavender

<b>Questionnaire :</b>	current 20090513	<b>Assessor:</b>	Chuck Chimera	<b>Designation:</b> H(HPWRA)
<b>Status:</b>	Assessor Approved	<b>Data Entry Person:</b>	Chuck Chimera	<b>WRA Score</b> 7
101	Is the species highly domesticated?		y=-3, n=0	n
102	Has the species become naturalized where grown?		y=1, n=-1	
103	Does the species have weedy races?		y=1, n=-1	
201	Species suited to tropical or subtropical climate(s) - If island is primarily wet habitat, then substitute "wet tropical" for "tropical or subtropical"		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
202	Quality of climate match data		(0-low; 1-intermediate; 2-high) (See Appendix 2)	High
203	Broad climate suitability (environmental versatility)		y=1, n=0	n
204	Native or naturalized in regions with tropical or subtropical climates		y=1, n=0	y
205	Does the species have a history of repeated introductions outside its natural range?		y=-2, ?=-1, n=0	y
301	Naturalized beyond native range		y = 1*multiplier (see Appendix 2), n= question 205	y
302	Garden/amenity/disturbance weed		n=0, y = 1*multiplier (see Appendix 2)	n
303	Agricultural/forestry/horticultural weed		n=0, y = 2*multiplier (see Appendix 2)	n
304	Environmental weed		n=0, y = 2*multiplier (see Appendix 2)	n
305	Congeneric weed		n=0, y = 1*multiplier (see Appendix 2)	y
401	Produces spines, thorns or burrs		y=1, n=0	n
402	Allelopathic		y=1, n=0	n
403	Parasitic		y=1, n=0	n
404	Unpalatable to grazing animals		y=1, n=-1	y
405	Toxic to animals		y=1, n=0	n
406	Host for recognized pests and pathogens		y=1, n=0	n
407	Causes allergies or is otherwise toxic to humans		y=1, n=0	n
408	Creates a fire hazard in natural ecosystems		y=1, n=0	n
409	Is a shade tolerant plant at some stage of its life cycle		y=1, n=0	y

410	Tolerates a wide range of soil conditions (or limestone conditions if not a volcanic island)	y=1, n=0	y
411	Climbing or smothering growth habit	y=1, n=0	
412	Forms dense thickets	y=1, n=0	n
501	Aquatic	y=5, n=0	n
502	Grass	y=1, n=0	n
503	Nitrogen fixing woody plant	y=1, n=0	n
504	Geophyte (herbaceous with underground storage organs -- bulbs, corms, or tubers)	y=1, n=0	n
601	Evidence of substantial reproductive failure in native habitat	y=1, n=0	n
602	Produces viable seed	y=1, n=-1	y
603	Hybridizes naturally	y=1, n=-1	
604	Self-compatible or apomictic	y=1, n=-1	
605	Requires specialist pollinators	y=-1, n=0	n
606	Reproduction by vegetative fragmentation	y=1, n=-1	y
607	Minimum generative time (years)	1 year = 1, 2 or 3 years = 0, 4+ years = -1	1
701	Propagules likely to be dispersed unintentionally (plants growing in heavily trafficked areas)	y=1, n=-1	
702	Propagules dispersed intentionally by people	y=1, n=-1	y
703	Propagules likely to disperse as a produce contaminant	y=1, n=-1	n
704	Propagules adapted to wind dispersal	y=1, n=-1	n
705	Propagules water dispersed	y=1, n=-1	n
706	Propagules bird dispersed	y=1, n=-1	n
707	Propagules dispersed by other animals (externally)	y=1, n=-1	n
708	Propagules survive passage through the gut	y=1, n=-1	
801	Prolific seed production (>1000/m2)	y=1, n=-1	
802	Evidence that a persistent propagule bank is formed (>1 yr)	y=1, n=-1	
803	Well controlled by herbicides	y=-1, n=1	
804	Tolerates, or benefits from, mutilation, cultivation, or fire	y=1, n=-1	
805	Effective natural enemies present locally (e.g. introduced biocontrol agents)	y=-1, n=1	

Designation: H(HPWRA)

WRA Score 7

## Supporting Data:

101	2010. WRA Specialist. Personal Communication.	No evidence that species has been highly domesticated
201	2010. South African National Biodiversity Institute. PlantzAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrika.com/plantnop/plectranneo-chil.htm">http://www.plantzafrika.com/plantnop/plectranneo-chil.htm</a>	Plants can be found growing naturally in dry thicket, open and sometimes rocky woodland, from the Eastern Cape, KwaZulu-Natal, Mpumalanga to Limpopo in South Africa, as well as in Zimbabwe, Zambia and Namibia.
202	2010. South African National Biodiversity Institute. PlantzAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrika.com/plantnop/plectranneo-chil.htm">http://www.plantzafrika.com/plantnop/plectranneo-chil.htm</a>	Plants can be found growing naturally in dry thicket, open and sometimes rocky woodland, from the Eastern Cape, KwaZulu-Natal, Mpumalanga to Limpopo in South Africa, as well as in Zimbabwe, Zambia and Namibia.
203	2010. Dave's Garden. PlantFiles: Lobster Flower, Blue Coleus. Dave's Garden, <a href="http://davesgarden.com/guides/pf/go/56953/">http://davesgarden.com/guides/pf/go/56953/</a>	Hardiness: USDA Zone 8a: to -12.2 °C (10 °F) USDA Zone 8b: to -9.4 °C (15 °F) USDA Zone 9a: to -6.6 °C (20 °F) USDA Zone 9b: to -3.8 °C (25 °F) USDA Zone 10a: to -1.1 °C (30 °F) USDA Zone 10b: to 1.7 °C (35 °F)
204	2010. South African National Biodiversity Institute. PlantzAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrika.com/plantnop/plectranneo-chil.htm">http://www.plantzafrika.com/plantnop/plectranneo-chil.htm</a>	Plants can be found growing naturally in dry thicket, open and sometimes rocky woodland, from the Eastern Cape, KwaZulu-Natal, Mpumalanga to Limpopo in South Africa, as well as in Zimbabwe, Zambia and Namibia.
205	2010. Dave's Garden. PlantFiles: Lobster Flower, Blue Coleus. Dave's Garden, <a href="http://davesgarden.com/guides/pf/go/56953/">http://davesgarden.com/guides/pf/go/56953/</a>	This plant has been said to grow in the following regions: Clayton, California San Leandro, California Boerne, Texas Spicewood, Texas
205	2010. KISC. 20100525 KISC Roadside Survey Weekly Report 5. <a href="http://www.hawaiiinvasivespecies.org/iscs/kisc/pdfs/20100525kiscroadsidesurveyweek5.pdf">http://www.hawaiiinvasivespecies.org/iscs/kisc/pdfs/20100525kiscroadsidesurveyweek5.pdf</a>	this species appears to be a fairly new introduction to cultivation in Hawaii
205	2010. PlantNET. New South Wales Flora Online - <i>Plectranthus neochilus</i> Schltr.. Royal Botanic Gardens & Domain Trust., Sydney <a href="http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus-neochilus">http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus-neochilus</a>	Distribution and occurrence: Doubtfully naturalized in the Sydney district. Native of southern Afr.
301	2008. Ziffer Berger, J.. Vascular Flora of the Babitonga Bay Region (Santa Catarina, Brazil): Diversity and Origins. PhD. Dissertation.. University of Erlangen - Nürnberg,	Most of these species do not invade natural habitats; they occur occasionally near their mother plants. However, some of them colonize disturbed areas and persist there, turning into invasive species...A less aggressive species is <i>Plectranthus neochilus</i> (Lamiaceae), an African medicinal plant occupying coastal dunes.
301	2010. KISC. 20100525 KISC Roadside Survey Weekly Report 5. <a href="http://www.hawaiiinvasivespecies.org/iscs/kisc/pdfs/20100525kiscroadsidesurveyweek5.pdf">http://www.hawaiiinvasivespecies.org/iscs/kisc/pdfs/20100525kiscroadsidesurveyweek5.pdf</a>	"this species has been seen sparingly naturalized on Oahu, and was seen being grown in a new development in Poipu"
301	2010. PlantNET. New South Wales Flora Online - <i>Plectranthus neochilus</i> Schltr.. Royal Botanic Gardens & Domain Trust., Sydney <a href="http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus-neochilus">http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus-neochilus</a>	Distribution and occurrence: Doubtfully naturalized in the Sydney district. Native of southern Afr.
302	2007. Randall, R.. Global Compendium of Weeds. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	No evidence as a garden, amenity or disturbance weed
303	2007. Randall, R.. Global Compendium of Weeds. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	No evidence as a weed of agriculture, horticulture or forestry.
304	2007. Randall, R.. Global Compendium of Weeds. <a href="http://www.hear.org/gcw/">http://www.hear.org/gcw/</a>	No evidence as an environmental weed.
305	2003. Macdonald, I.A.W./Reaser, J.K./Bright, C./Neville, L.E./Howard, G.W./Murphy, S.J./Preston, G. (eds.). Invasive alien species in southern Africa: national reports & directory of resources.. Global Invasive Species Programme, Cape Town, South Africa	<i>Plectranthus comosus</i> : Category 3 (Declared invader): • No further plantings allowed (except with special permission) • No trade of propagative material • Existing plants may remain but must be prevented from spreading • Prohibited within 30 m of the 1:50 year floodline of watercourses or wetlands unless authorisation obtained

401	2006. Smith, G.. Gardening with Succulents. Struik Publishers, London, Cape Town, Sydney	No spines, thorns, or burrs present.
402	2010. WRA Specialist. Personal Communication.	No evidence of allelopathy found in scientific or horticultural literature
403	2010. PlantNET. New South Wales Flora Online - <i>Plectranthus neochilus</i> Schltr.. Royal Botanic Gardens & Domain Trust., Sydney <a href="http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus~neochilus">http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus~neochilus</a>	Description: Unpleasantly aromatic, decumbent to erect, perennial herb 12–50 cm high [not parasitic]
404	2010. Annie's Annuals. <i>Plectranthus neochilus</i> . <a href="http://www.anniesannuals.com/signs/p%20-%20r/plectranthus_neochilus.htm">http://www.anniesannuals.com/signs/p%20-%20r/plectranthus_neochilus.htm</a>	Deer resistant, as it is skunky scented.
404	2010. San Marcos Growers. Products - <i>Plectranthus neochilus</i> . <a href="http://www.smgrowers.com/products/plants/plantdisplay.asp?plant_id=2884">http://www.smgrowers.com/products/plants/plantdisplay.asp?plant_id=2884</a>	The skunky aromatic foliage makes this plant somewhat deer resistant and in South Africa the plant is even thought to repel snakes.
406	2010. South African National Biodiversity Institute. PlantzAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrika.com/plantnop/plectranneochil.htm">http://www.plantzafrika.com/plantnop/plectranneochil.htm</a>	They are seldom attacked by pests.
407	2010. Dave's Garden. PlantFiles: Lobster Flower, Blue Coleus. Dave's Garden, <a href="http://davesgarden.com/guides/pf/go/56953/">http://davesgarden.com/guides/pf/go/56953/</a>	While it is a very attractive plant to look at, the stench from the leaves as soon as they are touched is truly stomach churning. I was given a plant and even though it was wrapped up and in the trunk of my car, the smell came through and nearly made me sick! [no evidence of toxicity listed, but smell may be unpleasant]
408	2010. Mweb. Perennials - Botanical Name: <i>Plectranthus neochilus</i> . <a href="http://gardening.mweb.co.za/0481.htm">http://gardening.mweb.co.za/0481.htm</a>	They are ideally suited to growth under the shade of trees, are generally shallow rooted and enjoy adequate water. They do however, store water in their stems and are therefore resistant to prolonged periods of drought.
408	2010. South African National Biodiversity Institute. PlantzAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrika.com/plantnop/plectranneochil.htm">http://www.plantzafrika.com/plantnop/plectranneochil.htm</a>	This <i>plectranthus</i> has succulent, grey-green leaves, which form an attractive ground cover even when the plant is not in flower. [no evidence of fire hazards, and unlikely with a succulent plant]
409	2010. Annie's Annuals. <i>Plectranthus neochilus</i> . <a href="http://www.anniesannuals.com/signs/p%20-%20r/plectranthus_neochilus.htm">http://www.anniesannuals.com/signs/p%20-%20r/plectranthus_neochilus.htm</a>	Does well in shade to full sun near the coast.
409	2010. South African National Biodiversity Institute. PlantzAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrika.com/plantnop/plectranneochil.htm">http://www.plantzafrika.com/plantnop/plectranneochil.htm</a>	This is a hardy, versatile herbaceous perennial, suitable both for shady subtropical and sunny water-wise gardens.
410	2010. South African National Biodiversity Institute. PlantzAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrika.com/plantnop/plectranneochil.htm">http://www.plantzafrika.com/plantnop/plectranneochil.htm</a>	Like most <i>Plectranthus</i> species, the plant prefers loam to sandy soil with good drainage and has relatively low water requirements.
411	2010. Annie's Annuals. <i>Plectranthus neochilus</i> . <a href="http://www.anniesannuals.com/signs/p%20-%20r/plectranthus_neochilus.htm">http://www.anniesannuals.com/signs/p%20-%20r/plectranthus_neochilus.htm</a>	The lime green, succulent leaves form a dense, ground hugging, carefree mat. [smothering mat]
411	2010. Mweb. Perennials - Botanical Name: <i>Plectranthus neochilus</i> . <a href="http://gardening.mweb.co.za/0481.htm">http://gardening.mweb.co.za/0481.htm</a>	Will form dense mats in a relatively short time. [potential to suppress other vegetation by smothering, but no direct evidence found]
411	2010. PlantNET. New South Wales Flora Online - <i>Plectranthus neochilus</i> Schltr.. Royal Botanic Gardens & Domain Trust., Sydney <a href="http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus~neochilus">http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&amp;lvl=sp&amp;name=Plectranthus~neochilus</a>	Description: Unpleasantly aromatic, decumbent to erect, perennial herb 12–50 cm high; branches succulent, finely and minutely hairy, or sparsely to densely covered with short and long hairs and scattered orange-red sessile glands. [possibly smothers other plants]

412	2006. Smith, G.. Gardening with Succulents. Struik Publishers, London, Cape Town, Sydney	"Plants typically grow as dense, low growing shrubs" [possibly smothers other plants, but no evidence found of dense thicket formation]
501	2002. Eggli, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Terrestrial
502	2002. Eggli, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Lamiaceae [not a grass]
503	2002. Eggli, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Lamiaceae [not a nitrogen fixing woody plant]
504	2002. Eggli, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Decumbent perennial succulent herbs [not a geophyte]
601	2009. Potgieter, C.J./Edwards, T.J./Van Staden, J.. Pollination of <i>Plectranthus</i> spp. (Lamiaceae) with sigmoid flowers in southern Africa. South African Journal of Botany. 75: 646–659.	No evidence of substantial reproductive failure in native habitat
602	2002. Eggli, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Nutlets dark brown, 1 mm [produces viable seed]
603	2010. Mweb. Perennials - Botanical Name: <i>Plectranthus neochilus</i> . <a href="http://gardening.mweb.co.za/0481.htm">http://gardening.mweb.co.za/0481.htm</a>	There are many attractive hybrids that have been developed locally in recent years. [unknown if able to hybridize naturally]
605	2009. Potgieter, C.J./Edwards, T.J./Van Staden, J.. Pollination of <i>Plectranthus</i> spp. (Lamiaceae) with sigmoid flowers in southern Africa. South African Journal of Botany. 75: 646–659.	Stirton (1977) described the insect visitors to cultivated plants of the South African species <i>Plectranthus neochilus</i> Schltr. The corolla of this species has a narrow tube (15–18 mm long) that ascends, then bends knee-like and expands about the middle (Codd, 1985). Although the corolla tube is not bent to the same extent as found in <i>P. petiolaris</i> and <i>P. laxiflorus</i> , <i>P. neochilus</i> makes for an interesting comparison. Stirton (1977) found five species of Megachilidae, three Xylocopa species, one species of Anthophora (now genus Amegilla) and <i>Apis mellifera</i> (all Hymenoptera, Apidae) to be effective pollinators. The bees landed on the boat-shaped lower lip, depressed it and exposed the stigma and stamens which transferred pollen ventrally onto the insects (Stirton, 1977). This study also listed unidentified bombyliids (Diptera: Bombyliidae), one syrphid species (Diptera: Syrphidae) and a sphingid moth, <i>Macroglossum trochilus</i> (Lepidoptera: Sphingidae), as ineffective visitors. [does not require specialist pollinators]
606	2010. South African National Biodiversity Institute. PlantZAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrica.com/plantnop/plectranneochil.htm">http://www.plantzafrica.com/plantnop/plectranneochil.htm</a>	Stems root easily and the plant spreads, forming a tidy clump
607	2010. South African National Biodiversity Institute. PlantZAfrica.com - <i>Plectranthus neochilus</i> . South African National Biodiversity Institute, <a href="http://www.plantzafrica.com/plantnop/plectranneochil.htm">http://www.plantzafrica.com/plantnop/plectranneochil.htm</a>	<i>P. neochilus</i> is a perennial, aromatic, succulent herb, which grows up to 500 mm high and 600 mm wide. The deep blue and purple flowers are borne from September to April. This <i>plectranthus</i> has succulent, grey green leaves, which form an attractive ground cover even when the plant is not in flower. It is reported that in some other parts of Africa, such as in Namibia, <i>P. neochilus</i> occurs as an annual.
701	2010. WRA Specialist. Personal Communication.	No evidence of unintentional dispersal, but small seeds could theoretically be dispersed in mud, tires, boots, etc.
702	2006. Smith, G.. Gardening with Succulents. Struik Publishers, London, Cape Town, Sydney	Planted intentionally as an ornamental
703	2010. WRA Specialist. Personal Communication.	No evidence that seeds contaminate produce
704	2002. Eggli, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Nutlets dark brown, 1 mm [small seeds without any mechanisms for wind-dispersal, probably gravity dispersed]
705	2010. WRA Specialist. Personal Communication.	No evidence of water dispersal, and does not grow near waterways
706	2002. Eggli, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Nutlets dark brown, 1 mm [no evidence of bird dispersal, and not fleshy-fruited]

707	2002. Eggl, U.. Illustrated handbook of succulent plants: Dicotyledons. Springer-Verlage, Berlin - Heidelberg - New York	Nutlets dark brown, 1 mm [seeds without any means of external attachment, although small enough to potentially be dispersed in mud on animals]
708	2010. WRA Specialist. Personal Communication.	Unknown if seeds survive passage through gut, but unlikely to be consumed
801	2010. WRA Specialist. Personal Communication.	Unknown if capable of prolific seed production
802	2010. WRA Specialist. Personal Communication.	Unknown if capable of forming a persistent propagule bank
803	2010. WRA Specialist. Personal Communication.	Unknown [no evidence that species is being controlled with herbicides]
804	2010. WRA Specialist. Personal Communication.	Unknown if tolerates from mutilation, cultivation or fire
805	2010. WRA Specialist. Personal Communication.	Unknown [no information on whether or not effective natural enemies are present locally]