

List of alien plant taxa recorded in Makana. The taxa are arranged in order of greatest threat following Robertson et al (2003)<sup>1</sup>. Category 1 (Act 43 of 1983) are weeds of economic importance and they should be controlled as a matter of urgency<sup>2</sup>. Makana contains over 90% of the serious problem plants listed by Robertson et al (2003). This list does not claim any degree of completeness, but serves to demonstrate the severity of the alien weed problem in Makana.

<b>Taxon</b>	<b>Common name</b>	<b>Rank of threat in Makana. ( ) = Rank of Robertson et al (2003)</b>	<b>Location in Makana</b>	<b>Category (Act 43 of 1983)</b>
<i>Lantana camara</i> L.	Lantana	1 (1)	Throughout Makana, Gardens in Grahamstown (3326DA, BC BD CA)	1
<i>Opuntia ficus-indica</i>	Sweet prickly pear	2 (3)	Throughout Makana	1
<i>Acacia saligna</i> (Labill.) H.L.Wendl.	Port Jackson willow	3 (4)	Hills around Grahamstown	2
<i>Cestrum laevigatum</i> Schtdl.	Inkberry	4 (5)	Gardens in Grahamstown	1
<i>Hakea suaveolens</i> R.Br.	Sweet hakea	5 (6)	Hills south west of Grahamstown	1
<i>Tamarix usneoides</i> E.Mey. ex Bunge x <i>T. ramosissima</i> Ledeb.	Chinese & pink tamarisks	6 (7)	River beds, Gardens in Grahamstown	1
<i>Tamarix chinensis</i> Lour.	Chinese & pink tamarisks	7 (8)	River beds, Gardens in Grahamstown	1
<i>Acacia mearnsii</i> De Wild.	Black wattle	8 (9)	Hills around Grahamstown	2
<i>Azolla filiculoides</i> Lam.	Red water fern	9 (10)	Blaauwkrantz Stream, (3326AC, 3326BC, 3326DA)	1
<i>Solanum mauritianum</i> Scop.	Bugweed	10 (11)	Gardens in Grahamstown	1
<i>Myriophyllum aquaticum</i> (Vell.) Verdc.	Parrot's feather	11 (12)	Rivers and streams. (3326AD, BC)	1
<i>Acacia cyclops</i> A.Cunn. ex G.Don	Red eye	12 (13)	Hills south west of Grahamstown	2
<i>Salvinia molesta</i> D.S.Mitch.	Kariba weed	13 (15)	Rivers and streams	1
<i>Pereskia aculeata</i> Mill.	Pereskia, Barbados gooseberry	14 (17)	Gardens in Grahamstown	1
<i>Datura stramonium</i> L.	Common thorn apple	15 (20)	River beds	1
<i>Arundo donax</i> L.	Giant reed	16 (21)	River beds	1
<i>Leptospermum laevigatum</i> (Gaertn.) F.Muell.	Australian myrtle	17 (22)	3325BD	1
<i>Eichhornia crassipes</i> (Mart.) Solms	Water hyacinth	18 (23)	New Years River dam	1
<i>Ricinus communis</i> L. var. <i>communis</i>	Castor-oil plant	19 (24)	Throughout Makana	2
<i>Acacia baileyana</i> F.Muell.	Bailey's wattle	20 (25)	Hills around Grahamstown	3
<i>Acacia dealbata</i> Link	Silver wattle	21 (27)	Hills around Grahamstown	1
<i>Melia azedarach</i> L.	Seringa	22 (28)	Gardens in Grahamstown	3
<i>Acacia decurrens</i> (J.C.Wendl.)	Green wattle	23 (30)	Hills around Grahamstown	2

Willd.				
<i>Cirsium vulgare</i> (Savi) Ten.	Spear or Scotch thistle	24 (35)	Throughout Makana	1
<i>Paraserianthes lophantha</i> (Willd.) I.C.Nielsen subsp. <i>lophantha</i>	Stink bean	25 (40)	Throughout Makana	1
<i>Schinus molle</i> L.	Pepper tree	26 (42)	Throughout Makana	
<i>Opuntia aurantiaca</i> Lindl.	Jointed cactus	27 (43)	Widespread throughout Makana	1
<i>Hakea sericea</i> Schrad. & J.C.Wendl.	Silky hakea	28 (44)	Hills south west of Grahamstown	1
<i>Acacia longifolia</i> (Andrews) Willd.	Long-leaved wattle	29 (45)	Hills around Grahamstown	1
<i>Solanum sisymbriifolium</i> Lam.	Dense-thorned bitter apple	30 (54)	Throughout Makana	1
<i>Jacaranda mimosifolia</i>	Jacaranda	31 (57)		3
<i>Acacia fimbriata</i> A.Cunn. ex G.Don				
<i>Acacia terminalis</i> (Salisb.) J.F.Macbr.				
<i>Achyranthes aspera</i> L. var. <i>sicula</i> L.				1
<i>Agave americana</i>				
<i>Ageratum conyzoides</i> L.				1
<i>Agrimonia procera</i> Wallr.				
<i>Anredera baselloides</i> (Humb., Bonpl. & Kunth) Baill.				1
<i>Araujia sericifera</i> Brot.				1
<i>Argemone mexicana</i> L. forma <i>mexicana</i>				1
<i>Argemone ochroleuca</i> Sweet subsp. <i>ochroleuca</i>				1
<i>Atriplex lindleyi</i> Moq. subsp. <i>inflata</i> (F.Muell.) Paul G.Wilson				3
<i>Atriplex nummularia</i> subsp <i>nummularia</i>				2
<i>Callistemon rigidus</i> R.Br.				
<i>Canna edulis</i>				
<i>Cardiospermum grandiflorum</i> Sw.				1
<i>Casuarina cunninghamiana</i> Miq.				2
<i>Convolvulus arvensis</i> L.				1
<i>Cortaderia jubata</i>				1
<i>Crotalaria agatiflora</i> Schweinf. subsp. <i>agatiflora</i>				
<i>Cuscuta campestris</i> Yunck.				1
<i>Duranta erecta</i> L.				
<i>Echium plantagineum</i> L.				1
<i>Eragrostis tef</i> (Zuccagni) Trotter				
<i>Ilex mitis</i> (L.) Radlk. var. <i>mitis</i>				
<i>Jasminum abyssinicum</i> Hochst. ex DC.				
<i>Juniperus bermudiana</i> L.				
<i>Lavatera arborea</i> L.				

Lavatera trimestris L.				
Lolium multiflorum Lam.				
Lolium perenne L.				
Lythrum hyssopifolia L.				
Macadamia ternifolia F.Muell.				
Mirabilis jalapa L.				
Nassella neesiana (Trin. & Rupr.) Barkworth				
Nasturtium officinale R.Br.				
Nerium oleander				1
Nicotiana glauca Graham				1
Nicotiana tabacum L.				
Oenothera glazioviana Micheli				
Oenothera indecora Cambess. subsp. indecora				
Oenothera parodiana Munz subsp. parodiana				
Oenothera rosea L'Hér. ex Aiton				
Oenothera stricta Ledeb. ex Link subsp. stricta				
Oenothera tetraptera Cav.				
Opuntia stricta Haw.				
Parkinsonia aculeata L.				
Pennisetum setaceum (Forssk.) Chiov.				1
Phytolacca americana L.				
Phytolacca dioica L.				3
Phytolacca octandra L.				
Pinus halepensis Mill. var. halepensis				2
Pinus pinaster Aiton				2
Plectranthus barbatus Andrews				3
Polypodium polypodioides (L.) Hitchc. subsp. ecklonii (Kunze) Schelpe				
Richardia brasiliensis Gomes				
Salsola kali L.				
Schinus terebinthifolius Raddi var. acutifolius Engl.				1
Senna didymobotrya (Fresen.) Irwin & Barneby				3
Senna multiglandulosa (Jacq.) Irwin & Barneby				
Senna pendula (Willd.) Irwin & Barneby var. glabrata (Vogel) Irwin & Barneby				3
Senna septemtrionalis (Viv.) Irwin & Barneby x S. multiglandulosa (Jacq.) Irwin				

Sesbania punicea (Cav.) Benth.				1
Solanum pseudocapsicum L.				
Sorghum halepense (L.) Pers.				2
Spartium junceum L.				1
Tribulus terrestris L.				
Ulmus parvifolia Jacq.				
Vinca major L.				
Xanthium spinosum L.				
Xanthium strumarium L.				1

<sup>1</sup>M.P. Robertson, M.H. Villet, D.H.K. Fairbanks, L. Henderson, S.I. Higgins, J.H. Hoffmann, D.C. Le Maitre, A.R. Palmer, I. Riggs, C.M. Shackleton and H.G. Zimmermann 2003. A proposed prioritization system for the management of invasive alien plants in South Africa. South African Journal of Science 99: 37-43

## <sup>2</sup>Combating of category 1 plants

15A. (1) Category 1 plants may not occur on any land or inland water surface other than in biological control reserves.

(2) A land user shall control any category 1 plants that occur on any land or inland water surface in contravention of the provisions of sub-regulation (1) by means of the methods prescribed in regulation 15E.

(3) No person shall, except in or for purposes of a biological control reserve –

- (a) establish, plant, maintain, multiply or propagate category 1 plants;
- (b) import or sell propagating material of category 1 plants or any category 1 plants;
- (c) acquire propagating material of category 1 plants or any category 1 plants.

(4) The executive officer may, on good cause shown in writing by the land user, grant written exemption from compliance with the requirements of sub-regulation (1) on such conditions as the executive officer may determine in each case.

## Combating of category 2 plants

15B. (1) Category 2 plants may not occur on any land or inland water surface other than a demarcated area or a biological control reserve.

(2) (a) The executive officer may on application in writing demarcate an area as an area where category 2 plants may occur, be established and be maintained.

(b) An area in respect of which a water use license for stream flow reduction activities has been issued in terms of section 36 of the National Water Act, 1998 (Act No. 36 of 1998) shall be deemed to be a demarcated area.

(3) The executive officer shall demarcate an area for the occurrence, establishment and maintenance of category 2 plants only if –

- (a) the category 2 plants in the area are cultivated under controlled circumstances; and
- (b) the land user concerned has been authorised to use water in terms of the National Water Act, 1998 (Act No. 36 of 1998); and
- (c) the category 2 plants or products of category 2 plants in the area are demonstrated to primarily serve a commercial purpose, use as a woodlot, shelter belt, building material, animal

fodder, soil stabilisation, medicinal or other beneficial function that the executive officer may approve; and

(d) all reasonable steps are taken to curtail the spreading of propagating material of the category 2 plants outside the demarcated areas.

(4) When an area is demarcated for the occurrence, establishment and maintenance of category 2 plants the executive officer may impose such additional conditions as may reasonably be deemed necessary to keep the category 2 plants in the area in check.

(5) No person shall sell propagating material of category 2 plants or any category 2 plants to another person unless such other person is a land user of a demarcated area or of a biological control reserve.

(6) No person shall acquire propagating material of category 2 plants or any category 2 plants unless such material or such plants are intended for use in a demarcated area or in a biological control reserve.

(7) Propagating material of category 2 plants or category 2 plants shall only be imported or sold in accordance with the provisions of the Plant Improvement Act, 1976 (Act No. 53 of 1976), the Agricultural Pests Act, 1983 (Act No. 36 of 1983) and the environment conservation regulations.

(8) A land user shall control any category 2 plants that occur on any land or inland water surface in contravention of the provisions of sub-regulation (1) by means of the methods prescribed in regulation 15E.

(9) Unless authorised thereto in terms of the National Water Act, 1998 (Act No. 36 of 1998), no land user shall allow category 2 plants to occur within 30 meters of the 1:50 year flood line of a river, stream, spring, natural channel in which water flows regularly or intermittently, lake, dam or wetland.

(10) The executive officer may, on good cause shown in writing by the land user, grant written exemption from compliance with one or more of the requirements of sub-regulations (1), (3), (5), (6), (8) and (9) on such conditions as the executive officer may determine in each case.

### **Combating of category 3 plants**

15C. (1) Category 3 plants shall not occur on any land or inland water surface other than in a biological control reserve.

(2) Subject to the provisions of sub-regulation (3), the provisions of sub-regulation (1) shall not apply in respect of category 3 plants already in existence at the time of the commencement of these regulations.

(3) (a) No land user shall allow category 3 plants to occur within 30 meters of the 1:50 year flood line of a river, stream, spring, natural channel in which water flows regularly or intermittently, lake, dam or wetland.

(b) The executive officer may impose such additional conditions as may reasonably be deemed necessary with regard to category 3 plants already in existence at the time of the commencement of these regulations.

(c) A land user must take all reasonable steps to curtail the spreading of propagating material of category 3 plants.

(d) The executive officer may, after consultation with the land user, issue a direction in terms of section 7 of the Act that category 3 plants in existence at the time of the commencement of these regulations must be controlled by means of the measures prescribed in regulation 15F.

(4) No person shall, except in or for purposes of a biological control reserve –

(a) plant, establish, maintain, multiply or propagate category 3 plants;

(b) import or sell propagating material of category 3 plants or any category 3 plants;

(c) acquire propagating material of category 3 plants or any category 3 plants.

(5) The executive officer may, on good cause shown in writing by the land user, grant written exemption from compliance with one or more of the requirements of sub-regulations (1), (3) and (4) on such conditions as the executive officer may determine in each case.