

Supplementary material to: Wilson JRU, Ivey P, Manyama P, Nänni I. A new national unit for invasive species detection, assessment and eradication planning. S Afr J Sci. 2013;109(5/6), Art. #0111, 13 pages. <http://dx.doi.org/10.1590/sajs.2013/20120111>

Supplementary table 1: Development of a Species Under Surveillance – Possible Eradication or Containment Targets (SUSPECT) list. Updated versions will be available at www.invasives.org.za/resources/lists and www.sanbi.org.za/programmes/threats/invasive-species-programme/lists. This list is based on Table X from the *Conservation of Agricultural Resources Act of 1983*, amended 2001, 'Declared weeds and invader plants (regulation 15)' as of 2007, with updates from the *National Environmental Management: Biodiversity Act (10/2004): Draft Alien and Invasive Species Regulations 2009* (NEMBA) as well as revisions to this draft list in response to comments received. Correct as of January 2010. Additions to the list from the South African National Biodiversity Institute's Invasive Species Programme's (SANBI ISP) work are highlighted.

Botanical name	Common name	Proposed NEMBA category	Date added by SANBI ISP (day/month/year)
<i>Acacia fimbriata</i> A.Cunn. ex Don	Fringed wattle	1a	21/11/2012
<i>Acacia pendula</i> A.Cunn.	Weeping myall, Boree	3	
<i>Acacia retinodes</i> Schltld.	Swamp wattle	1a	21/11/2012
<i>Acacia viscidula</i> Benth.	Sticky wattle	1a	21/11/2012
<i>Agave americana</i> L. var. <i>americana</i>	American agave	2	
<i>Albizia julibrissin</i> Durazz.	Silk tree, Pink siris	3	
<i>Alnus glutinosa</i> (L.) Gaertn.	Black alder	3	
<i>Anacardium occidentale</i> L.	Kasjoeboom /Cashew		
<i>Anigozanthos flavidus</i> DC.	Kangaroo paws	1a	29/10/2010
<i>Anigozanthos rufus</i> Labill.	Kangaroo paws	1a	29/10/2010
<i>Asphodelus fistulosus</i> L.	Onionweed	1a	17/05/2013
<i>Avena</i> spp. excluding <i>A. sativa</i> (includes <i>A. barbata</i> Pott ex Link, <i>A. fatua</i> L., <i>A. sterilis</i> L.)	Wild oats	?	
<i>Banksia ericifolia</i> L.f.	Heath-leaved banksia	1a	29/10/2010
<i>Berberis julianae</i> Schneid.	Wintergreen barberry	?	17/05/2013
<i>Bougainvillea glabra</i> Choisy	Bougainvillea, Paper flower	?	
<i>Bougainvillea spectabilis</i> Willd.	Bougainvillea, Great bougainvillea		
<i>Brachychiton populneus</i> (Schott & Endl.) R.Br.	Kurrajong, Bottle tree	3	

Botanical name	Common name	Proposed NEMBA category	Date added by SANBI ISP (day/month/year)
<i>Bromus</i> spp. (includes <i>B. commutatus</i> Schrad., <i>B. diandrus</i> Roth, <i>B. japonicus</i> Thunb., <i>B. hordaceus</i> L. <i>subsp. divaricatus</i> (Bonnier & Layens) Kerguelen (= <i>B. molliformis</i> J. Lloyd), <i>B. catharticus</i> Vahl var. <i>catharticus</i> (= <i>B. uniolooides</i> Kunth)	Bromus spp., Brome spp.	?	
<i>Canna X generalis</i> L.H.Bailey (= <i>C. orchiodes</i> L.H.Bailey)	Garden canna	?	
<i>Carex buchananii</i> Bergg.	New Zealand sedge	?	
<i>Carex comans</i> Bergg. (= <i>C. albula</i> Allan)	New Zealand sedge	?	
<i>Carex flagellifera</i> Colenso	New Zealand sedge	?	
<i>Carex longebrachiata</i> Boeckeler	Australian sedge	?	
<i>Carex testacea</i> Sol. ex Boott	New Zealand sedge	?	
<i>Celtis sinensis</i> Pers.	Chinese nettle tree	3	
<i>Cereus</i> spp.	Queen of the night	?	
<i>Chrysopogon zizanioides</i> (L.) Roberty (= <i>Vetiveria zizanioides</i> (L.) Nash)	Vetiver grass	?	
<i>Coffea arabica</i> L. and cultivars	Coffee tree	?	
<i>Colocasia esculenta</i> (L.) Schott (= <i>C. antiquorum</i> Schott)	Elephant's-ear, Madumbe	?	
<i>Corymbia citriodora</i> (Hook.) K.D. Hill & L.A.S. Johnson (= <i>Eucalyptus citriodora</i> Hook.)	Lemon-scented gum	?	
<i>Crataegus mexicana</i> DC. (= <i>C. pubescens</i> misapplied in South Africa.)	Mexican hawthorn	3	
<i>Crataegus monogyna</i> Jacq. (= <i>C. oxyacantha</i> L. var. <i>praecox</i> hort. ex Loudon)	English hawthorn, Common hawthorn	?	
<i>Crataegus phaenopyrum</i> (L.f.) Medik.	Washington thorn	?	
<i>Crotalaria agatiflora</i> Schweinf.	Bird flower, Canarybird bush	3	
<i>Cyathea australis</i> (R.Br.) Domin	Rough tree fern		

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<i>Cyathea cooperi</i> (Hook. ex F.Muell.) Domin (= <i>Sphaeropteris cooperi</i> (Hook. ex F.Muell.) R.M.Tryon)	Australian tree fern	?	
<i>Cylindropuntia pallida</i> (Rose) F.M.Knuth	Thistle cholla	?	17/05/2013
<i>Cynodon dactylon</i> (L.) Pers.	Bermuda grass, Common couch	2	
<i>Cynodon nlemfuensis</i> Vanderyst	East African couch	?	
<i>Cyphomandra betacea</i> Cav.	Tree tomato	3	
<i>Elaeagnus X reflexa</i> C.Morren & Decne. (= <i>E. pungens</i> Thunb. var. <i>reflexa</i> (C. Morren & Decne.) C.K.Schneid.)	Elaeagnus	?	
<i>Epipremnum aureum</i> (Linden & Andre)	Devil's ivy	1a	17/05/2013
<i>Eucalyptus botryoides</i> Sm.	Bangalay, Southern Mahogany	?	
<i>Eucalyptus globulus</i> Labill.	Blue gum, Tasmanian blue gum	?	
<i>Eucalyptus gomphocephala</i> DC	Tuart	?	
<i>Eucalyptus microcorys</i> F.Muell.	Tallow gum	?	
<i>Eucalyptus resinifera</i> Sm.	Red mahogany gum	?	
<i>Eucalyptus sideroxylon</i> A.Cunn. ex Woolfs	Black ironbark, Red ironbark	?	
<i>Euphorbia pulcherrima</i> Willd. ex Klotzsch	Poinsettia	?	
<i>Ficus carica</i> L.	Edible fig	?	
<i>Foeniculum vulgare</i> Mill.	Fennel	?	
<i>Furcraea foetida</i> (L.) Haw.	Mauritius hemp	1a	18/10/2010
<i>Gunnera tinctoria</i> (Molina) Mirb. (= <i>G.</i> <i>chilensis</i> Lam., <i>Panke tinctoria</i> Molina)	Chilean rhubarb	?	
<i>Gypsophila paniculata</i> L.	Baby's breath	?	
<i>Hakea salicifolia</i> (Vent.) B.L.Burt (= <i>H. saligna</i> (Andr.) Knight)	Willow hakea	3	
<i>Harrisia balansae</i> (K. Schumann) N.P. Taylor & Zappi	Climbing harrisia	1a	17/05/2013

Botanical name	Common name	Proposed NEMBA category	Date added by SANBI ISP (day/month/year)
<i>Harrisia pomanensis</i> (F. A. C. Weber) Britton & Rose	Midnight lady	1a	17/05/2013
<i>Hedera helix</i> L.	English ivy	3	
<i>Hypericum pseudohenryi</i> N.Robson	Irish Tutsan	?	17/05/2013
<i>Iris douglasiana</i> Herb.	Douglas iris	?	
<i>Iris missouriensis</i> Nutt.	Western blue flag, Rocky Mountain iris	?	
<i>Jatropha multifida</i> L.	Coral plant	?	
<i>Lablab purpureus</i> (L.) Sweet	Lablab bean	?	
<i>Leptospermum scoparium</i> J.R.Forst. & G.Forst.	Manuka myrtle, New Zealand tea tree	3	
<i>Lolium multiflorum</i> Lam.	Italian ryegrass	2	
<i>Lolium perenne</i> L.	Perennial ryegrass	2	
<i>Mangifera indica</i> L.	Mango	?	
<i>Melaleuca parvistaminea</i> Byrnes	Swamp Paperbark	?	29/10/2010
<i>Melaleuca quinquenervia</i> (Cav.) S.T.Blake	Broad-leaved paper bark / Paper Bark Tea Tree	?	29/10/2010
<i>Melilotus indica</i> (L.) All.	Annual yellow sweet clover	?	
<i>Mimosa albida</i> Humb. & Bonpl. ex Willd.	?	?	17/05/2013
<i>Moringa oleifera</i> Lam. (= <i>Moringa pterygosperma</i> Gaertn.)	Horse-radish tree	?	
<i>Morus nigra</i> L.	Black mulberry	3	
<i>Nymphaea</i> spp	Water lilies	?	
<i>Oenothera biennis</i> L.	Common evening-primrose	?	
<i>Oenothera glazioviana</i> Micheli	Evening-primrose	?	
<i>Oenothera indecora</i> Cambess.	Evening-primrose	3	
<i>Oenothera jamesii</i> Torr. & A.Gray	Giant evening-primrose	?	
<i>Oenothera laciniata</i> Hill	Fragrant evening-primrose	?	
<i>Oenothera rosea</i> L'Herit. ex Aiton	Pink evening primrose	3	

Botanical name	Common name	Proposed NEMBA category	Date added by SANBI ISP (day/month/year)
<i>Oenothera stricta</i> Ledeb. ex Link	Sweet sundrop	3	
<i>Oenothera tetraptera</i> Cav.	White evening primrose	3	
<i>Opuntia salmiana</i> J.Parm. ex Pfeiff.	Bur cactus		
<i>Paspalum dilatatum</i> Poir.	Common paspalum	?	
<i>Paspalum urvillei</i> Steud.	Tall paspalum	?	
<i>Persicaria limbata</i> (Meisn.) H.Hara (= <i>Polygonum limbatum</i> Meisn.)	Knotweed	?	
<i>Petiveria alliacea</i> L.	Guinea-hen weed	1a	17/05/2013
<i>Physalis peruviana</i> L.	Cape gooseberry	?	
<i>Phytolacca octandra</i> L.	Forest inkberry	1	
<i>Populus deltoides</i> Bartram ex Marshall (including subspp. <i>wislizenii</i> (= <i>P. wislizenii</i> Sarg.); and <i>deltoides</i>)	Match poplar, Valley match poplar	2	
<i>Populus nigra</i> L. var. <i>italica</i> Münchh.	Lombardy poplar	2	
<i>Populus simonii</i> Carrière	Simon poplar	3	
<i>Prunus cerasifera</i> Ehrh.	Cherry plum, Myrobalan plum	3	
<i>Pterocarya fraxinifolia</i> (Lam. ex Poir.) Spach.	Caucasian wing nut	?	
<i>Quercus acutissima</i> Carruth.	Bristle oak	?	
<i>Quercus robur</i> L.	English oak	?	
<i>Raphanus raphanistrum</i> L.	Wild radish	?	
<i>Rosa canina</i> L.	Dog-rose	3	
<i>Rumex crispus</i> L.	Curly dock	3	
<i>Sagittaria latifolia</i> Willd.	Broadleaf arrowhead	1a	19/12/2012
<i>Sagittaria platyphylla</i> (Engelm.) J.G. Sm.	Arrowhead	1a	18/10/2010
<i>Salix babylonica</i> L. Not to be confused with the indigenous <i>S. mucronata</i> Thunb. (= <i>S. capensis</i> , <i>S. subserrata</i> , <i>S. woodii</i>)	Weeping willow	?	
<i>Salix fragilis</i> L. Not to be confused with the indigenous <i>S. mucronata</i> Thunb. (= <i>S. capensis</i> , <i>S. subserrata</i> , <i>S. woodii</i>)	Crack or Brittle willow	?	
<i>Schinus molle</i> L.	Pepper tree	?	

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<i>Spartinia alterniflora</i> Loisel.	Smooth cordgrass	1a	17/05/2013
<i>Styphnolobium japonicum</i> (L.) Schott (= <i>Sophora japonica</i> L.)	Japanese pagoda tree	?	
<i>Syncarpia glomulifera</i> (Sm.) Nied.	Turpentine tree	?	
<i>Syzygium paniculatum</i> Gaertn. (= <i>Eugenia myrtifolia</i> Sims)	Australian water pear, Australian brush-cherry	3	
<i>Tradescantia pallida</i> (Rose) D.R.Hunt (= <i>Setcreasea purpurea</i> Boom)	Purpleheart	?	
<i>Tradescantia spathacea</i> Sw. (= <i>Rhoeo spathacea</i> (Sw.) Stearn)	Boat lily	?	
<i>Ulmus parvifolia</i> Jacq. (= <i>U. chinensis</i> Pers.)	Chinese elm	3	
<i>Verbascum thapsus</i> L.	Great or Common mullein	?	10/11/2011

Supplementary table 2: Species listed as category 1a under the *National Environmental Management: Biodiversity Act (10/2004): Draft Alien and Invasive Species Regulations 2009* (NEMBA). Does not include species only listed on the Prince Edward Islands, or indigenous mammal hybrids. For birds, mammals and freshwater fishes all hybrids with at least one parent species that is indigenous are recorded as 1a (unless otherwise listed), but have not been considered here. There are no terrestrial invertebrates, marine species or freshwater fishes listed in this category. Correct as of 26 January 2009. Updated versions will be available at www.invasives.org.za/resources/lists and www.sanbi.org.za/programmes/threats/invasive-species-programme/lists

Scientific name	Category
Invertebrates (freshwater)	
<i>Astacus leptodactylus</i>	1a
<i>Cherax destructor</i>	1a
Birds and mammals	
<i>Tragelaphus euryceros</i>	1a
<i>Tragelaphus imberbis</i>	1a
<i>Madoqua kirkii</i>	1a
<i>Fringilla coelebs</i>	1a in KZN
<i>Erythrocebus patas</i>	1a in KZN
<i>Sciurus carolinensis</i>	1a in KZN

Scientific name	Category
Reptiles and amphibians	
<i>Chelydra serpentina</i>	1a
<i>Trachemys spp.</i>	1a
<i>Rhinotyphlops spp</i>	1a
<i>Python natalensis</i> x <i>Python molurus</i>	1a
<i>Bitis gabonica</i> x <i>Bitis</i> species	1a
<i>Anolis carolinensis</i>	1a in KZN
<i>Basiliscus plumifrons</i>	1a in KZN
<i>Bitis gabonica</i> All Gaboon adder subspecies (including the West African Gaboon Adder <i>Bitis gabonica rhinoceros</i>) and ecotypes, except the Maputaland ecotype	1a in KZN
<i>Bitis nasicornis</i>	1a in KZN
<i>Brachylophus fasciatus</i>	1a in KZN
<i>Chamaeleo jacksonii</i>	1a in KZN
<i>Chamaeleo melleri</i>	1a in KZN
<i>Corallus enhydris</i>	1a in KZN
<i>Crotalus cerastes</i>	1a in KZN
<i>Crotalus durissus</i>	1a in KZN
<i>Crotalus enyo</i>	1a in KZN
<i>Crotalus lepidus</i>	1a in KZN
<i>Crotalus ruber</i>	1a in KZN
<i>Crotalus vegrandis</i>	1a in KZN
<i>Dendroaspis jamesoni</i>	1a in KZN
<i>Dendroaspis viridis</i>	1a in KZN
<i>Dendrobates spp.</i>	1a in KZN
<i>Elaphe mandarina</i>	1a in KZN
<i>Elaphe porphyracea</i>	1a in KZN
<i>Elaphe taeniura</i>	1a in KZN
<i>Furcifer oustaleti</i>	1a in KZN
<i>Furcifer pardalis</i>	1a in KZN
<i>Heloderma suspectum</i>	1a in KZN
<i>Lachesis muta</i>	1a in KZN
<i>Liasis fuscus</i>	1a in KZN
<i>Liasis mackloti</i>	1a in KZN
<i>Morelia amethystina</i>	1a in KZN
<i>Morelia boeleni</i>	1a in KZN
<i>Morelia spilotes</i>	1a in KZN

Scientific name	Category
<i>Naja kaouthia</i>	1a in KZN
<i>Ophiophagus hannah</i>	1a in KZN
<i>Python molurus</i>	1a in KZN
<i>Python regius</i>	1a in KZN
<i>Python reticulatus</i>	1a in KZN
<i>Rhacodactylus auriculatus</i>	1a in KZN (risk assessment required)
<i>Spilotes pullatus</i>	1a in KZN
<i>Trimeresurus albolabris</i>	1a in KZN
<i>Trimeresurus purpureomaculatus</i>	1a in KZN
<i>Tropidolaemus wagleri</i>	1a in KZN
<i>Uroplatus fimbriatus</i>	1a in KZN
<i>Uroplatus henkeli</i>	1a in KZN
<i>Uroplatus phantasticus</i>	1a in KZN
<i>Varanus komodoensis</i>	1a in KZN
<i>Varanus salvator</i>	1a in KZN
Plants	
<i>Acacia implexa</i> Benth.	1a
<i>Acacia paradoxa</i> DC. (= <i>A. Armata</i> R.Br.)	1a
<i>Acacia stricta</i> (Andrews) Willd.	1a
<i>Billardiera heterophylla</i> (Lindl.) L.W.Cayzer & Crisp (= <i>Sollya heterophylla</i> Lindl.)	1a
<i>Cabomba caroliniana</i> A.Gray	1a
<i>Chondrilla juncea</i> L.	1a
<i>Crotolaria agatiflora</i> Schweinf.	1a
<i>Cryptostegia grandiflora</i> R.Br.	1a
<i>Cryptostegia madagascariensis</i> Bojer ex Decne.	1a
<i>Cytisus scoparius</i> (L.) Link (= <i>Genista scoparia</i> (L.) Lam.)	1a
<i>Diplocyclos palmatus</i> (L.) C.Jeffrey	1a
<i>Equisetum hyemale</i> L.	1a
<i>Euphorbia esula</i> L. (= <i>E. xpseudovirgata</i> (Schur) Soó, <i>E. tommasiniana</i> Bertol., <i>E. virgata</i> Waldst. & Kit.)	1a
<i>Fallopia sachalinensis</i> (F.Schmidt) Ronse Decr. (= <i>Polygonum sachalinense</i> F.Schmidt, <i>Reynoutria sachalinensis</i> (F.Schmidt) Nakai)	1a

Scientific name	Category
<i>Genista monspessulana</i> (L.) L.A.S.Johnson (= <i>Cytisus monspessulanus</i> L., <i>C. candicans</i> (L.) DC.)	1a
<i>Hakea drupacea</i> (C.F.Gaertn.) Roem. & Schult. (= <i>H. suaveolens</i> R.Br.)	1a
<i>Hydrilla verticillata</i> (L.f.) Royle	1a
<i>Hydrocleys nymphoides</i> (Humb. & Bonpl. ex Willd.) Buchenau	1a
<i>Iris pseudacorus</i> L.	1a
<i>Kunzea ericoides</i> (A.Rich.) Joy Thomps. (= <i>Leptospermum ericoides</i> A. Rich.)	1a
<i>Ludwigia peruviana</i> (L.) H. Hara	1a
<i>Lythrum salicaria</i> L.	1a
<i>Melaleuca hypericifolia</i> Sm.	1a
<i>Nymphoides peltata</i> (S.G.Gmel.) Kuntze (= <i>Limnanthemum peltatum</i> S.G.Gmel.)	1a
<i>Paspalum quadrifarium</i> Lam.	1a
<i>Paulownia tomentosa</i> (Thunb.) Steud. (= <i>Paulownia imperialis</i> Siebold & Zucc.)	1a
<i>Pueraria montana</i> (Lour.) Merr. var. <i>lobata</i> (Willd.) Maesen & S.M.Almeida (= <i>P. lobata</i> (Willd.) Ohwi)	1a
<i>Rivina humilis</i> L.	1a
<i>Tephrocactus articulatus</i> (Pfeiff.) Backeb. (= <i>Opuntia articulata</i> (Pfeiff.) D.R.Hunt)	1a
<i>Metrosideros excelsa</i> Sol. ex Gaertn. (= <i>M. tomentosa</i> A.Rich.)	1a in Overstrand District

KZN, Kwa-Zulu-Natal