

**S3 Table.** Marine and terrestrial watch list species that might be transported along the twenty shipping routes to each South African port with the highest relative contribution to marine and terrestrial establishment debt. In brackets is a description of each species.

South African port	Marine species	Terrestrial species
Richards Bay	<i>Alitta succinea</i> (annelid)	<i>Alternanthera philoxeroides</i> (aquatic plant; herb)
	<i>Asterias amurensis</i> (sea star)	<i>Boiga irregularis</i> (reptile)
	<i>Carijoa riisei</i> (coral)	<i>Butomus umbellatus</i> (aquatic plant)
	<i>Charybdis japonica</i> (crustacean)	<i>Corbicula fluminea</i> (mollusc)
	<i>Crepidula fornicata</i> (mollusc)	<i>Culex quinquefasciatus</i> (insect)
	<i>Gymnodinium catenatum</i> (alga)	<i>Macaca fascicularis</i> (mammal)
	<i>Halophila stipulacea</i> (aquatic plant)	<i>Monomorium pharaonis</i> (insect)
	<i>Hemigrapsus sanguineus</i> (crustacean)	<i>Najas minor</i> (aquatic plant)
	<i>Littorina littorea</i> (mollusc)	<i>Pycnonotus cafer</i> (bird)
	<i>Musculista senhousia</i> (mollusc)	<i>Tridentiger trigonocephalus</i> (fish)
	<i>Mya arenaria</i> (mollusc)	
	<i>Mytilopsis sallei</i> (mollusc)	
	<i>Pterois volitans</i> (fish)	
	<i>Rapana venosa</i> (mollusc)	
	<i>Sabella spallanzanii</i> (annelid)	
	<i>Schizoporella errata</i> (bryozoan)	
	<i>Styela clava</i> (tunicate)	
<i>Tubastraea coccinea</i> (coral)		
Durban	<i>Asterias amurensis</i> (sea star)	<i>Alternanthera philoxeroides</i> (aquatic plant; herb)
	<i>Carijoa riisei</i> (coral)	<i>Boiga irregularis</i> (reptile)
	<i>Charybdis japonica</i> (crustacean)	<i>Corbicula fluminea</i> (mollusc)
	<i>Crepidula fornicata</i> (mollusc)	<i>Culex quinquefasciatus</i> (insect)
	<i>Geukensia demissa</i> (mollusc)	<i>Macaca fascicularis</i> (mammal)
	<i>Gymnodinium catenatum</i> (alga)	<i>Monomorium pharaonis</i> (insect)
	<i>Halophila stipulacea</i> (aquatic plant)	<i>Najas minor</i> (aquatic plant)
	<i>Hemigrapsus sanguineus</i> (crustacean)	<i>Piper aduncum</i> (tree; shrub)
	<i>Littorina littorea</i> (mollusc)	<i>Pycnonotus cafer</i> (bird)
	<i>Musculista senhousia</i> (mollusc)	<i>Rhinella marina</i> (amphibian)
	<i>Mya arenaria</i> (mollusc)	<i>Tridentiger trigonocephalus</i> (fish)
	<i>Mytilopsis sallei</i> (mollusc)	
	<i>Potamocorbula amurensis</i> (mollusc)	
	<i>Pterois volitans</i> (fish)	
	<i>Rapana venosa</i> (mollusc)	
	<i>Sabella spallanzanii</i> (annelid)	
	<i>Sargassum fluitans</i> (alga)	
<i>Schizoporella errata</i> (bryozoan)		
<i>Styela clava</i> (tunicate)		
<i>Tubastraea coccinea</i> (coral)		
<i>Undaria pinnatifida</i> (aquatic plant/alga)		
Port Elizabeth	<i>Carijoa riisei</i> (coral)	<i>Alternanthera philoxeroides</i> (aquatic plant; herb)
	<i>Charybdis japonica</i> (crustacean)	<i>Anolis carolinensis</i> (reptile)
	<i>Chthamalus proteus</i> (crustacean)	<i>Anoplophora glabripennis</i> (insect)
	<i>Crepidula fornicata</i> (mollusc)	<i>Butomus umbellatus</i> (aquatic plant)
	<i>Geukensia demissa</i> (mollusc)	<i>Bythotrephes longimanus</i> (crustacean)
	<i>Gymnodinium catenatum</i> (alga)	<i>Centaurea biebersteinii</i> (herb)
	<i>Halophila stipulacea</i> (aquatic plant)	<i>Corbicula fluminea</i> (mollusc)
	<i>Hemigrapsus sanguineus</i> (crustacean)	<i>Culex quinquefasciatus</i> (insect)
	<i>Littorina littorea</i> (mollusc)	<i>Didymosphenia geminata</i> (alga)
	<i>Musculista senhousia</i> (mollusc)	<i>Dreissena polymorpha</i> (mollusc)
	<i>Mya arenaria</i> (mollusc)	<i>Eriocheir sinensis</i> (crustacean)
	<i>Mytilopsis sallei</i> (mollusc)	<i>Gymnocephalus cernuus</i> (fish)
	<i>Pterois volitans</i> (fish)	<i>Lumbricus rubellus</i> (annelid)
	<i>Rapana venosa</i> (mollusc)	<i>Macaca fascicularis</i> (mammal)
	<i>Sabella spallanzanii</i> (annelid)	<i>Monomorium pharaonis</i> (insect)
	<i>Sargassum fluitans</i> (alga)	<i>Najas minor</i> (aquatic plant)
	<i>Schizoporella errata</i> (bryozoan)	<i>Neogobius melanostomus</i> (fish)
<i>Styela clava</i> (tunicate)	<i>Petromyzon marinus</i> (fish)	

*Tubastraea coccinea* (coral)  
*Undaria pinnatifida* (aquatic plant/alga)

*Piper aduncum* (tree; shrub)  
*Potamopyrgus antipodarum* (mollusc)  
*Pycnonotus cafer* (bird)  
*Rangia cuneata* (mollusc)  
*Rhinella marina* (amphibian)  
*Rhithropanopeus harrisi* (crustacean)  
*Spartina anglica* (grass)  
*Tridentiger trigonocephalus* (fish)  
*Vespula vulgaris* (insect)  
*Zizania latifolia* (grass)

Cape Town

*Asterias amurensis* (sea star)  
*Carijoa riisei* (coral)  
*Charybdis japonica* (crustacean)  
*Crepidula fornicata* (mollusc)  
*Geukensia demissa* (mollusc)  
*Gymnodinium catenatum* (alga)  
*Hemigrapsus sanguineus* (crustacean)  
*Littorina littorea* (mollusc)  
*Musculista senhousia* (mollusc)  
*Mya arenaria* (mollusc)  
*Mytilopsis sallei* (mollusc)  
*Potamocorbula amurensis* (mollusc)  
*Pterois volitans* (fish)  
*Rapana venosa* (mollusc)  
*Sabella spallanzanii* (annelid)  
*Sargassum fluitans* (alga)  
*Schizoporella errata* (bryozoan)  
*Styela clava* (tunicate)  
*Tubastraea coccinea* (coral)  
*Undaria pinnatifida* (aquatic plant/alga)

*Acanthogobius flavimanus* (fish)  
*Alternanthera philoxeroides* (aquatic plant; herb)  
*Anolis carolinensis* (reptile)  
*Anoplophora glabripennis* (insect)  
*Boiga irregularis* (reptile)  
*Butomus umbellatus* (aquatic plant)  
*Bythotrephes longimanus* (crustacean)  
*Centaurea biebersteinii* (herb)  
*Corbicula fluminea* (mollusc)  
*Culex quinquefasciatus* (insect)  
*Dreissena polymorpha* (mollusc)  
*Eriocheir sinensis* (crustacean)  
*Gymnocephalus cernuus* (fish)  
*Lumbricus rubellus* (annelid)  
*Macaca fascicularis* (mammal)  
*Monomorium pharaonis* (insect)  
*Najas minor* (aquatic plant)  
*Neogobius melanostomus* (fish)  
*Petromyzon marinus* (fish)  
*Piper aduncum* (tree; shrub)  
*Potamopyrgus antipodarum* (mollusc)  
*Pycnonotus cafer* (bird)  
*Rangia cuneata* (mollusc)  
*Rhinella marina* (amphibian)  
*Rhithropanopeus harrisi* (crustacean)  
*Spartina anglica* (grass)  
*Tridentiger trigonocephalus* (fish)  
*Vespula vulgaris* (insect)

Saldanha Bay

*Asterias amurensis* (sea star)  
*Carijoa riisei* (coral)  
*Charybdis japonica* (crustacean)  
*Crepidula fornicata* (mollusc)  
*Geukensia demissa* (mollusc)  
*Gymnodinium catenatum* (alga)  
*Halophila stipulacea* (aquatic plant)  
*Hemigrapsus sanguineus* (crustacean)  
*Littorina littorea* (mollusc)  
*Musculista senhousia* (mollusc)  
*Mya arenaria* (mollusc)  
*Mytilopsis sallei* (mollusc)  
*Potamocorbula amurensis* (mollusc)  
*Pterois volitans* (fish)  
*Rapana venosa* (mollusc)  
*Sabella spallanzanii* (annelid)  
*Sargassum fluitans* (alga)  
*Schizoporella errata* (bryozoan)  
*Styela clava* (tunicate)  
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*Acanthogobius flavimanus* (fish)  
*Alternanthera philoxeroides* (aquatic plant; herb)  
*Boiga irregularis* (reptile)  
*Corbicula fluminea* (mollusc)  
*Culex quinquefasciatus* (insect)  
*Macaca fascicularis* (mammal)  
*Monomorium pharaonis* (insect)  
*Najas minor* (aquatic plant)  
*Piper aduncum* (tree; shrub)  
*Pycnonotus cafer* (bird)  
*Rhinella marina* (amphibian)  
*Tridentiger trigonocephalus* (fish)

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