

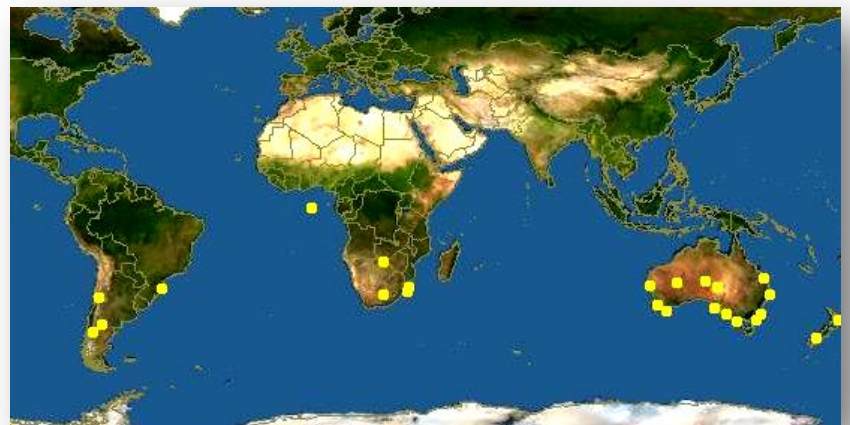
Juncus kraussii - Sea Rush

This tough, wiry plant, the **Sea Rush** (*Juncus kraussii*), might not be particularly striking but it is a really important component of saltmarshes. Look for this sturdy, salt tolerant perennial in the higher areas of saltmarsh, usually just below *Casuarina* trees. It is invaluable in limiting erosion along river banks, sand banks and mud flats.



The spiky, hollow, tubular leaves of *Juncus* serve another vital role in these marshy areas. Connected to a dense network of highly porous roots, they enable oxygen to diffuse rapidly from the atmosphere around the leaves into the smelly anaerobic silt below, where some oxygen leaks out and helps sustain aerobic organisms such as invertebrates.

Sea Rush, *Juncus kraussii*, can be found along the coasts of the three major southern landmasses: South America, Africa, and Australia together with New Zealand. However, there are small differences between



the plants that occur in each of these three continental groupings and botanists have divided the species, *J. kraussii*, into three **subspecies**, one subspecies for each continent. Botanically, the differences between **subspecies** are not as obvious as those between **species**, and although they can interbreed, geographic isolation means that this rarely happens. Sea Rush was first discovered in Africa where it is called *J. kraussii*

subsp. *kraussii*; in Australia and New Zealand, we have *J. kraussii* subsp. *australiensis*; and the South American form from Argentina, Brazil, Chile and Uruguay, is known as *J. kraussii* subsp. *austerus*.

In southern Africa, Sea Rush is of major cultural significance and is woven into traditional sleeping mats, baskets and other household items. Gifts, known as *umabo*, made from Sea Rush and given by the bride to the groom's family, are the most highly prized gifts in a traditional Zulu wedding settlement. The demand is such that now Sea Rush is propagated and farmed commercially¹.



¹ South African National Biodiversity Institute, PlantzAfrica:

<http://www.plantzafrica.com/planthij/juncuskraus.htm>

World Distribution Map: modified from Encyclopedia of Life:

<http://www.discoverlife.org/mp/20m?map=Juncus+kraussii>

Woven mat image from Andres Moraga Textile Art:

<http://www.andresmoragatextileart.com/textiles/african/south-and-east-africa/zulu-mat/>

Woven place mat image:

<http://memorablemeanders.blogspot.com.au/2008/10/zulu-crafts-and-traditions.html>

**Alison Downing, Brian Atwell & Kevin Downing,
Department of Biological Sciences, 24th June 2013**

