

Evolutionary Assembly of Vegetation in Saline Habitats: A Southern Hemisphere Perspective

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Menu

- diversity of types of saline vegetation in South Africa
- sources of halophyte diversity in SA
- crossing Indian Ocean to Australia (link between SA and AU)
- known molecular phylogenetic patterns in Australian halophytes
- ideas about their origins

Greater Capensis K.
 Sarcocornia
 Salicornia
 Suaeda
 Atriplex
 Limonium
 Malephora

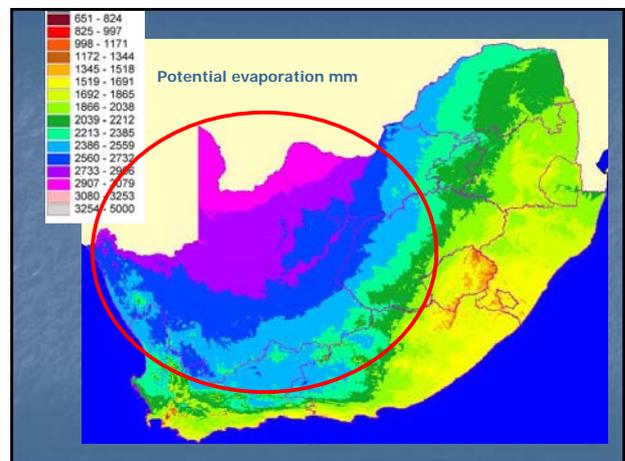
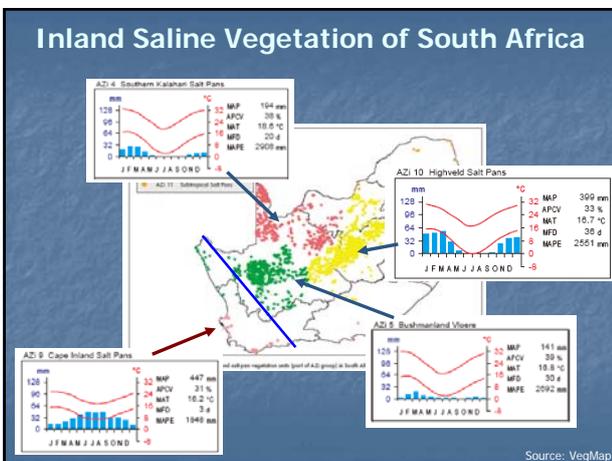
Salicornia overbergensis sp. nov.

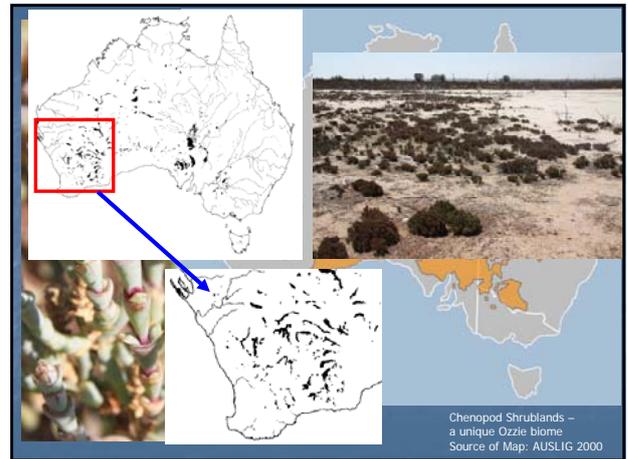
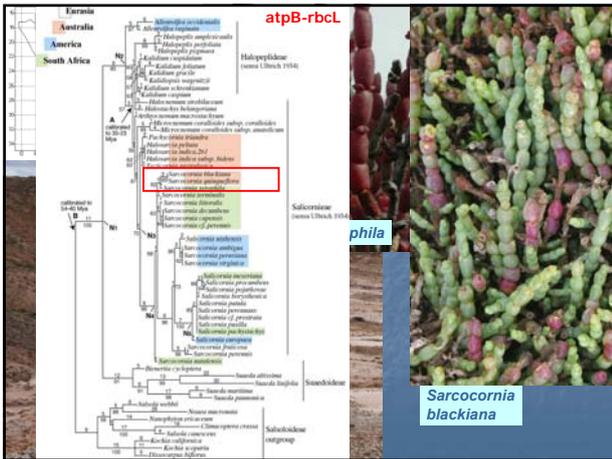
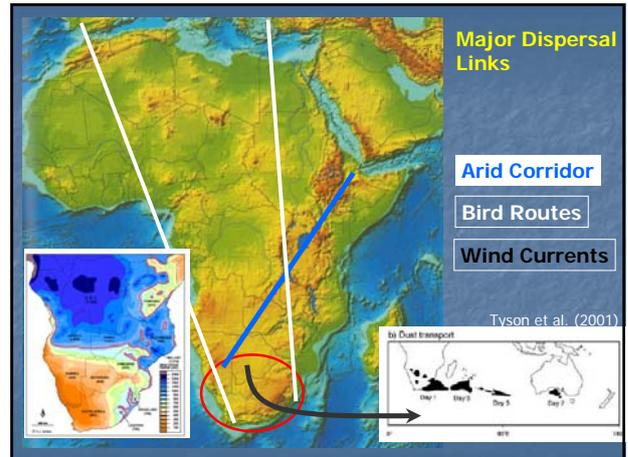
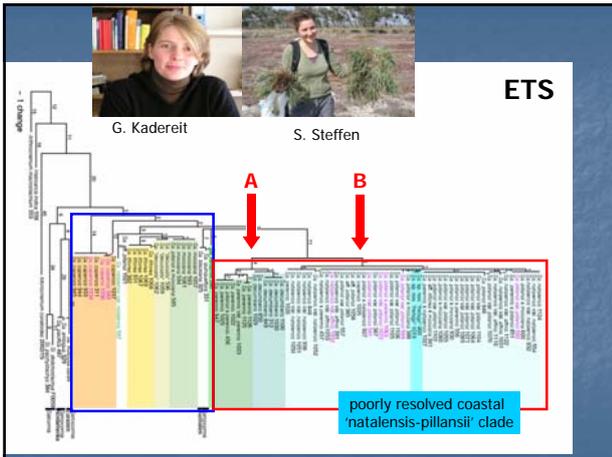
Inland Salt Pans of Capensis
 Sarcocornia freitagii

Estuarine Salt Marshes

Subtidal
 Zostera
 Spartina

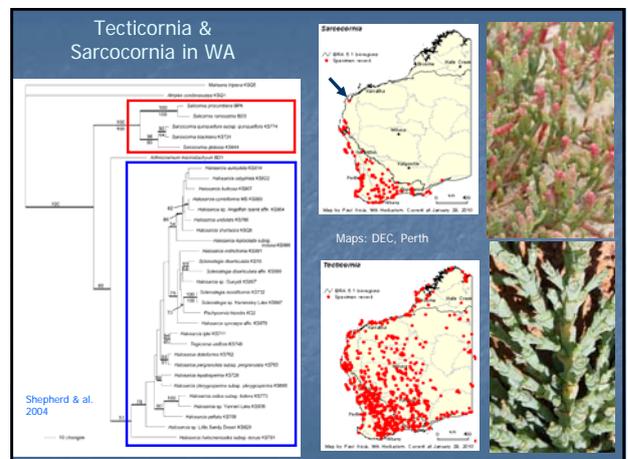
Intertidal & Supratidal
 Sarcocornia
 Salicornia
 Chenolea
 Suaeda
 Atriplex
 Limonium
 Sporobolus
 Juncus
 Triglochin
 Samolus
 Cotula
 Plantago
 Puccinellia

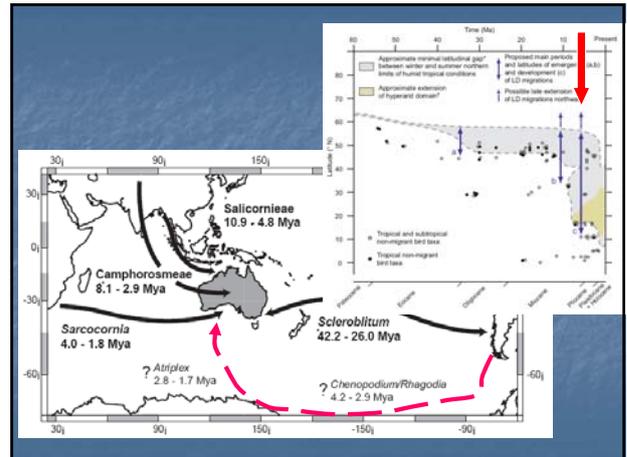
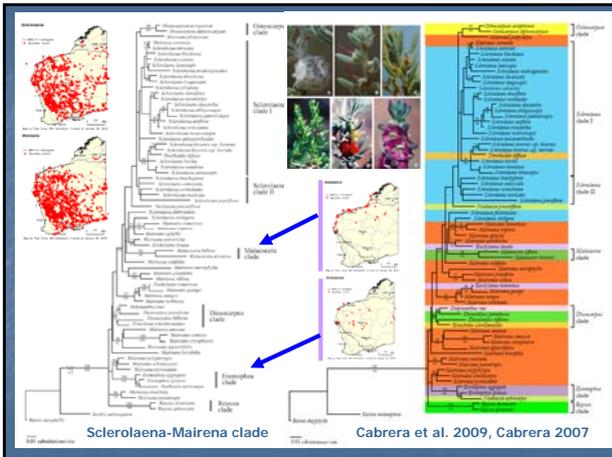




Australia:
The southern headquarters of chenopods

- no endemic subfamilies or tribes
- 28 native genera (many endemic, but...)
- ≈ 400 species (*Tecticornia* ≈ 80)
- biome dominated by chenopods (Chenopod Shrublands)
- Why? *The driest and the longest dry continent of the World?*





Origins Australian Halophytes

- (1) Number of recent dispersal events (almost all younger than mid-Miocene)
- (2) in situ speciation (at least *Tecticornia* shows "rapid recent" pattern)
- (3) One taxon (*Scleroblitum*: tribe *Chenopodieae*) presumed to have arrived earlier (Oligocene?)
- (4) How old is the halophyte flora of Australia anyway?

Thanks you !



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