



TRANSFORMING GENETIC RESOURCES INTO VALUE

Use of Plant Genetic Resources (current and potential review)

National Plant Agrobiodiversity Conservation Strategy for the Sultanate of Oman - Stakeholder Consultation Workshop, 2-3rd November 2015

The presentation

- Current
- Potential
- Issues

Current

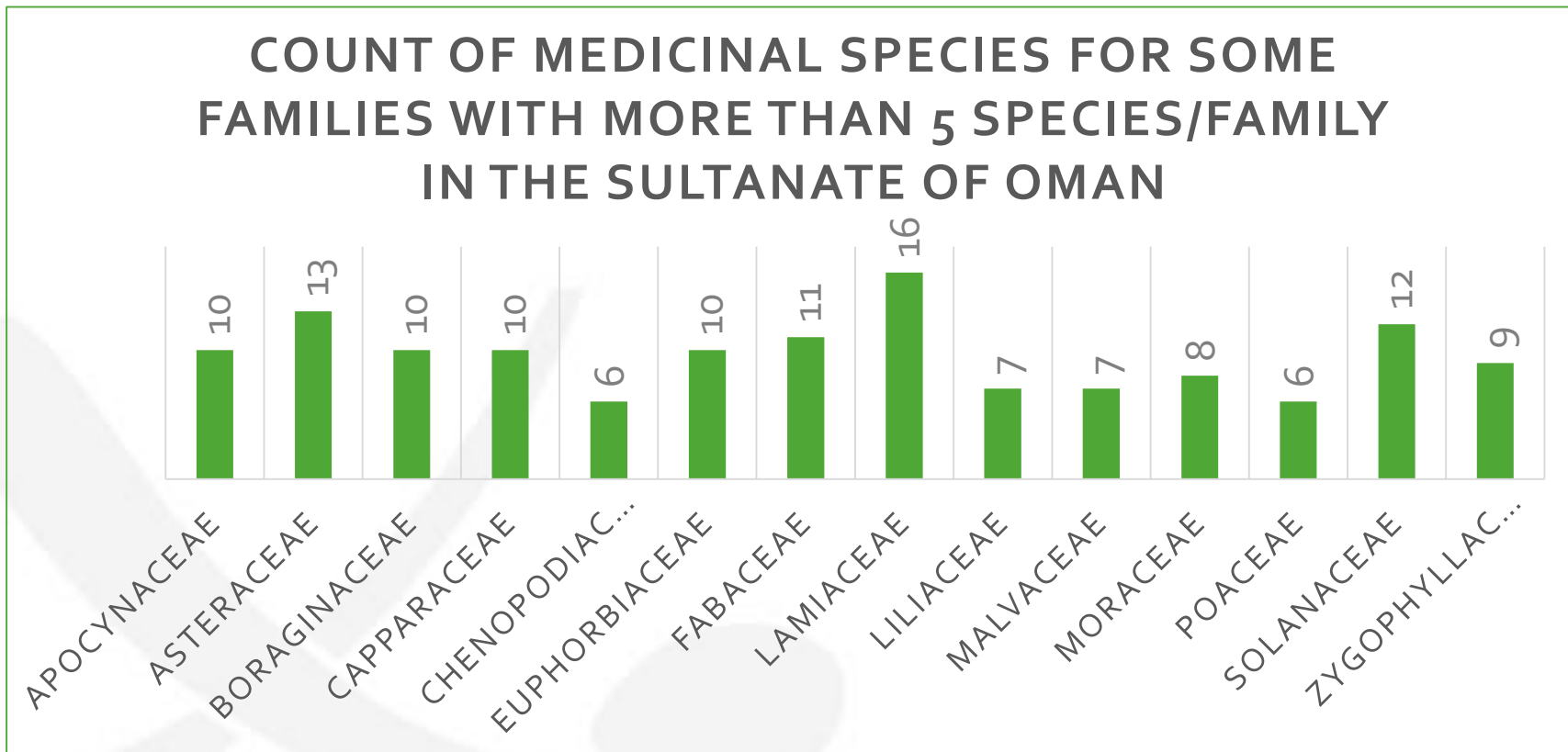
- i. Use of biotic (diseases and pests) and abiotic (salinity, drought etc.) resistant/ tolerant rootstocks with local fruit crops cultivars for multiplication and distribution among the farmers.
- ii. Improvement of local cultivars of wheat and barley through breeding programs using high yielding, disease resistant and early to medium maturity characteristics from exotic cultivars used as donors.

Current

- iii. Improvement of indigenous lime for tolerance to diseases like witches broom through breeding program using the techniques of biotechnology and tissue culture.
- iv. Improvement of local date palm cultivars for their quality through breeding program using the techniques of biotechnology and tissue culture.
- v. Use of indigenous perennial forage grass species in the grass/fodder production systems.

Medicinal Plants of Oman

Taxonomy: Families



Medicinal Plants of Oman

Research activities

Issues studied:

- Cytotoxic properties of some herbal plants in Oman
- Essential oil composition and nutrient analysis of selected medicinal plants in Sultanate of Oman
- Antioxidant properties, Cytotoxic and Antibacterial Screening
- Folk medicine in Oman
- plants-Boswellia (Luban) species

Potential

Use category	Family	Genera	Species
Crops	33	83	109
Crop wild relatives	69	217	659
Medicinal plant	92	272	423
Forestry	36	58	184
Ornamental	49	75	285
Combined socioeconomic plant	121	410	1062

Potential

Landraces/Fruits

Common name	Scientific name
Acid Lime	(Citrus aurantifolia)
Banana	(Musa sp.)
Ber	(Zizipus mauritiana)
Coconut	(Cocos nucifera)
Datepalm	(Phoenix dactylifera)
Grape	(Vitis vinifera)
Guava	(Psidium guajava)
Mango	(Mangifera indica)
Papaya	(Carica papaya)
Pomegranate	(Punica granatum)
Sweet Lime	(Citrus limetta)

Potential Vegetables

Common name	Scientific name
Carrot	(<i>Daucus carota</i>)
Chickpea	(<i>Cicer arietinum</i>)
Cowpea	(<i>Vigna unguiculata</i>)
Cucumber	(<i>Cucumis sativus</i>)
Garlic	(<i>Allium sativum</i>)
Onion	(<i>Allium cepa</i>)
Radish	(<i>Raphanus sativus</i>)
Sweet melon	(<i>Cucumis melo</i>)
Sweet Potato	(<i>Ipomoea batatas</i>)

Potential

Field Crops (grains/fodders)

Common name	Scientific name
Alfalfa	(<i>Medicago sativa</i>)
Barley	(<i>Hordeum vulgare</i>)
Cotton	(<i>Gossipium arboreum</i>)
Maize	(<i>Zea mays</i>)
Pearl millet	(<i>Pennisetum glaucum</i>)
Safflower	(<i>Carthamus tinctorius</i>)
Sesame	(<i>Sesamum indicum</i>)
Sorghum	(<i>Sorghum bicolor</i>)
Sugarcane	(<i>Saccharum officinarum</i>)

Issues

- Systemic/standard collection, conservation, characterization/evaluation documentation systems
- Collaborations and coordination
- Capacity building
- Promoting use of plant genetic resources (innovative)

