

Validity of Current Herbal Medicinal Products

**Aruna D. Weerasooriya, PhD FLS
Research Scientist
Prairie View A&M University**

Medicinal Plants

- Over 70,000 plant species are thought to be Medicinal
- 80% of people living in developing countries use traditional medicine as primary healthcare needs
- The global trade in herbal products is over \$60 billion a year
- Most of the popular commercial drugs have been derived from plants

Traditional medicine systems

- Indian system of TM (Ayurveda, Siddha and Unani)
- Traditional Chinese Medicine
- Ancient Iranian Medicine
- Ancient Islamic Medicine
- Traditional Korean Medicine
- Traditional African Medicine

Traditional Methodology

- Collection
- Substitute plants
- Processing
- Detoxification
- Combining several species

Use of Medicinal Plants in the United States

- Herbal Dietary Supplements
- Pharmaceuticals
- Fragrances
- Flavoring ingredients
- Coloring ingredients

Herbal Dietary Supplements: *Issues in the US*

***Morinda citrifolia* L. (Rubiaceae)**
Noni – Anticancer/antioxidant



Herbal Dietary Supplements:

Issues in the US

Lycium barbarum L. (Solanaceae)
Gojiberry – for long life



Herbal Dietary Supplements:

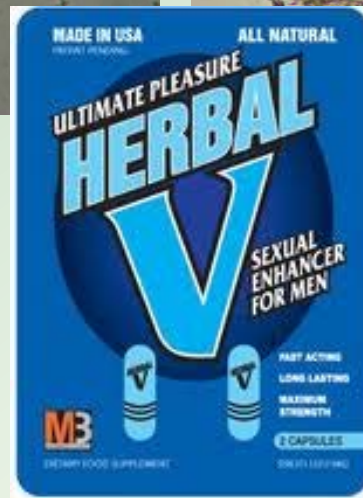
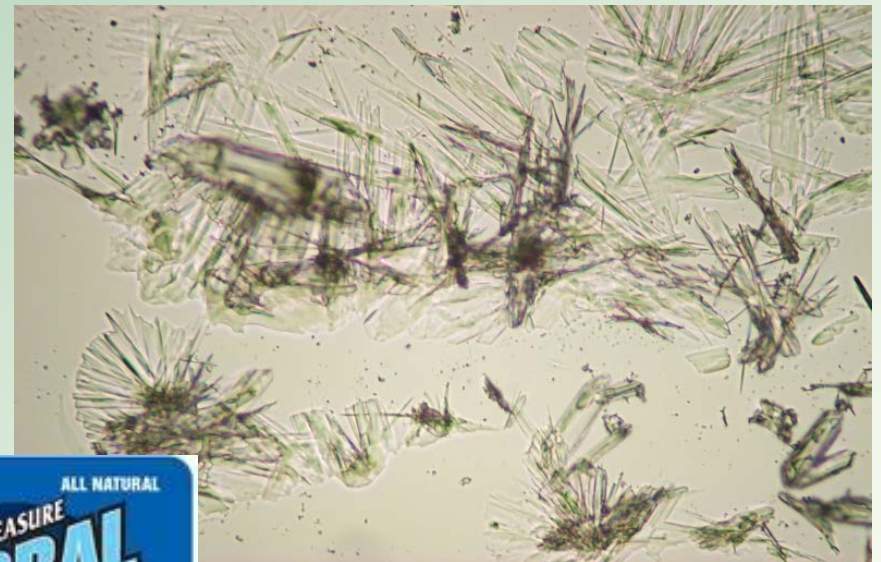
Issues in the US

Hoodia gordonii (Masson) Sweet ex Decne. (Asclepiadaceae)
Appetite Suppressant



Herbal Dietary Supplements: *Issues in the US*

Herbal Viagra



Uncontrolled Psychoactive Plants

Turnera diffusa Willd. ex Schult.
(Turneraceae)
Damiana



Leonotis leonurus (L.) R.Br.
(Lamiaceae)
Wild Dagga



Leonurus sibiricus L.
(Lamiaceae)
Marihuanilla



Medicinal Plants as Cash Crops

Salvia miltiorrhiza (Lamiaceae)

Red Sage - promotes blood circulation and vessel inflammation



Medicinal Plants as Cash Crops

Centella asiatica (Apiaceae)

Gotukola



Centella erecta (Apiaceae)

Erect Centella



Medicinal Plants as Cash Crops

- *Stevia rebaudiana* Natural Sweetener



Medicinal Vegetables

–*Trichosanthes cucumerina*
(Snake gourd)
Anticancer activity



Medicinal Vegetables

- *Momordica charantia*
(Bitter melon)
Anti-diabetic activity



Medicinal Vegetables

– *Lagenaria siceraria*
(Bottle gourd)

Free-radical scavenging, Reduce s appetite



Medicinal Vegetables

– *Dioscorea* sp.
(Yams)

HRT and Contraceptive



Medicinal Vegetables

– *Arctium lappa*
(Burdock/Gobi)

Antioxidants, Prebiotic properties,
Suppresses lipid synthesis

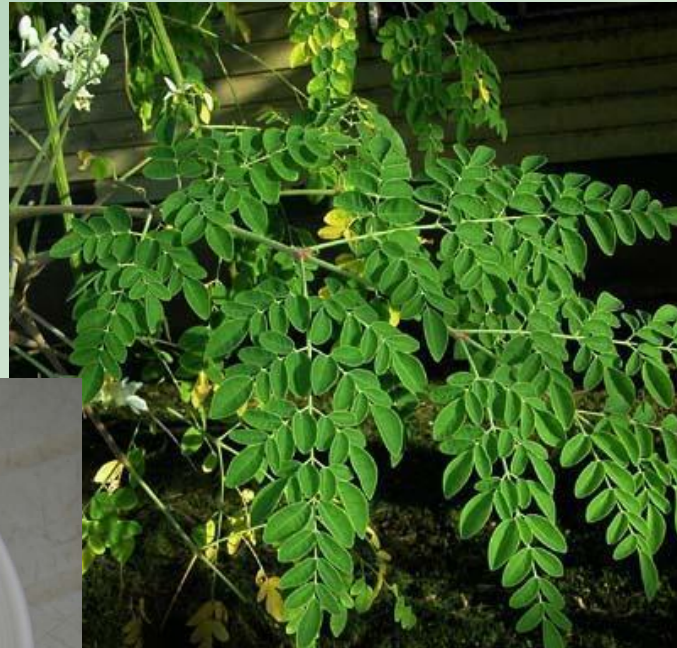


Medicinal Vegetables

– *Moringa oleifera*
(Drumstick)

Gastric ulcers, heartburn

Anti-tumor



Medicinal Vegetables

– *Cynara scolymus* (Artichoke)

Cynarine: Liver and gall bladder function

Lowers Cholesterol



Medicinal Vegetables

– *Cynara cardunculus*
(Cardoon)



Medicinal Vegetables

– *Asparagus officinalis* (Asparagus)

Antioxidants, Immunostimulants,
Anti-inflammatory, Reproductive health



Medicinal culinary herbs

- *Piper sarmentosum*
(Lolot)
Lowering cholesterol,
Preventing Asthma and Allergies



Medicinal culinary herbs

- *Perilla frutescens*
(Sisho)
Anti-tumor, Anti-allergic



Medicinal culinary herbs

- *Pandanus amaryllifolius*
(Pandanus leaves)
Anti-oxidant; anti-tumor,
Lowering cholesterol



Medicinal culinary herbs

- *Cymbopogon citratus*
(Lemon Grass)
Anti-mutagenic



Medicinal culinary herbs

- *Citrus hystrix*
(Kafir lime leaves)
Hypertension, Neurostimulator



Medicinal culinary herbs

- *Alpinia galanga*
(Galangal)
Anti-tumor,
Increase sperm count



Medicinal culinary herbs

- *Murraya koenigii*
(Curry leaves)
Anti-inflammatory, Anti-tumor



Medicinal spices



Turmeric



Star Anise



Chilies



Cinnamon

Medicinal spices



Cardamons



Cloves

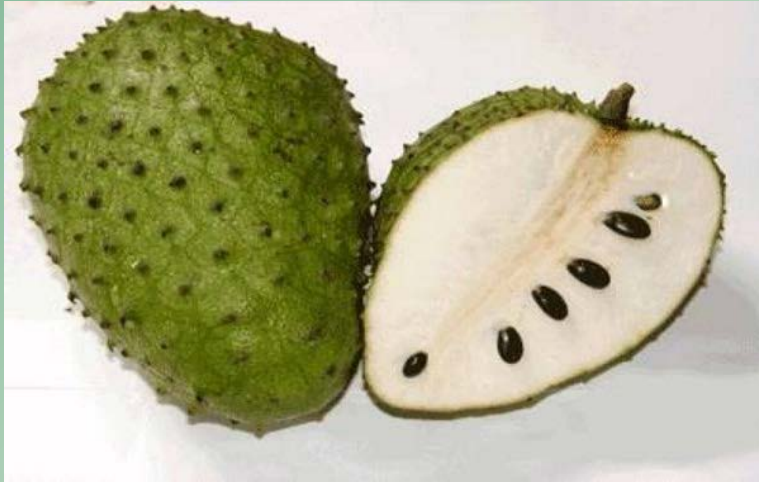


Fenugreek seeds



Nigella

Medicinal Fruits



Soursop / Guanabana



Pomegranate



Goji berry



Star fruit

Medicinal Fruits



Mangosteen



Mamey Sapote

Medicinal Fruits



Garcinia

Herbal Wines



Thank You!