



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

# Center for Smart Agriculture

## Production management of medicinal and aromatic crops



**Module 1:** Medicinal crops

**Session 1:** Identification and uses of medicinal crops



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## What is Medicinal plant ?

- Medicinal plants are plants that have a recognized medical use.
- Their use ranges the production of mainstream pharmaceutical products to herbal medicine preparations.
- Herbal medicine is one of the oldest forms of medical treatment in human history and could be considered one of the forerunners of the modern pharmaceutical trade.



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

## Aloe

### ALOE-VERA (Gritkumari )

- green leaves contain aloe gel and a sticky yellow residue called latex.
- Burn healing
- Wound healing
- Treat Sunburn
- Radiation-induced skin reactions
- Aloe with conditioner for silkier, smoother hair.
- Take orally to reduce cholesterol and triglycerides for a healthy heart.



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

## Aloe

### ALOE-VERA

- i. Aloe vera is good for irritated or inflamed skin.
- ii. Aloe vera helps repair your skin from the most tender of wounds.
- iii. Aloe vera helps speed the process of healing to burns and other wounds.
- iv. Aloe vera is hydrating, rejuvenating and toning for your skin.
- v. Aloe vera moisturizes and softens your skin.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Tulsi

- Blood purifier
- Preventive against malaria & dengue fever
- Chewing tulsi leaves relieves cold & flu
- Chewing 12 leaves of basil, twice a day prevent stress.
- The leaves are a nerve tonic & also sharpen memory.
- = • → decoction of the leaves + honey + ginger effective remedy for bronchitis, asthma, influenza, cough and cold juice of basil leaves + honey (if taken regularly for 6 months) expel renal stone via the urinary tract.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Tulsi

- Ancient Egyptians thought tulsi was a treatment for snakebites or stings from scorpions, but if you encounter either of these, seek treatment from a doctor instead.

Many people also use fresh tulsi leaves to rub on mosquito bites to relieve discomfort. A tea made with tulsi combined with peppercorns is given as a treatment to reduce fever.

The leaves of holy basil are used all over the world in cooking as a seasoning.

- i. Immune Support
- ii. Stress Relief
- iii. Digestion Aid



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## NEEM

- Neem inhibits allergic reactions when applied externally or eaten.
- Oral doses of neem leaf extracts
  - reduced insulin requirements by between 30% and 50% for diabetes.
- Neem extracts give significant protection from discomfort and speed the healing of gastric problems
- Neem quickly kills external parasites and a neem decoction is safer and just as effective as standard treatments for head lice and scabies. .



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Periwinkle

Periwinkle is also used for treating diarrhea, vaginal discharge, throat ailments, tonsillitis, chest pain, **high blood pressure**, sore throat, intestinal pain and swelling (inflammation), toothache, and water retention (edema).





**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Periwinkle

Periwinkle is also used for treating diarrhea, vaginal discharge, throat ailments, tonsillitis, chest pain, **high blood pressure**, sore throat, intestinal pain and swelling (inflammation), toothache, and water retention (edema).



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Bhringaraj

### Bhringaraj

- the main herb for the hair care and cirrhosis
- works to rejuvenate kidneys and liver. As oil, it treats graying and balding, makes the hair darker, and promotes deep sleep. It also improves complexion.
- the root powder is used for treating hepatitis, enlarged spleen and skin disorders
- anti-inflammatory properties, the herb is also used for treating hyperacidity.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Coleus

coleus is used to treat allergies, dry eye, skin conditions such as eczema and **psoriasis**, obesity, painful menstrual periods, irritable bowel syndrome (IBS), urinary tract infections (UTI), bladder infections, advanced cancer, blood clots, sexual problems in men, trouble sleeping (**insomnia**)



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## GINGER

- stomach-soothing effects
- easing post-surgery nausea and vomiting
- Sipping ginger tea can help calm an upset stomach, as well as ease congestion when you've got a cold.
- ginger extract may slow the growth of colorectal and ovarian cancer cells,
- useful in treating chronic inflammation because it partially inhibits two important enzymes that play a role in inflammation gone away -- cyclooxygenase (COX) and 5-lipoxygenase (LOX).



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## AMLA

- To stimulate appetite (Use pickles and preserves made from the green fruits)
- For hemorrhage, diarrhea and dysentery
- Seed fried in ghee and ground in conjee is applied as Lep to the forehead to stop bleeding from the nose.
  - For hiccup and for painful respiration Use juice or extract of the fruit combined with honey and pipli
  - Due to vitamin C and polyphenols, is a antioxidant.
- Benefits heart, eyes, and brain



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

## Citronella

**citronella has been used for a variety of purposes, including:**

as an **insect repellent**.

as an antifungal agent.

to treat parasitic **infections**.

to promote wound healing.

to lift mood or fight fatigue.

in **perfumes** or as a flavor additive in **food**



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Lemon Grass

Lemongrass is a plant. The leaves and the oil are used to make medicine.

Lemongrass is used for treating digestive tract spasms, stomachache,

**high blood pressure,**

convulsions,

**pain,**

vomiting,

cough,

achy joints (rheumatism),

fever, the common cold, and exhaustion.

It is also used to kill germs and as a mild astringent.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Rose

Roses are best known as ornamental plants grown for their **flowers** in the garden and sometimes indoors.

They have been also used for commercial perfumery and commercial cut flower crops.

Some are used as landscape plants,  
for hedging and  
for other utilitarian purposes such as game cover and slope  
stabilization.





**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

## TURMERIC

### TURMERIC

- stimulate digestion
- boost liver function
- Curcumin a means of reducing breast cancer risk among women
- When paired with vitamin D, curcumin may help protect against Alzheimer's disease
- curcumin can protect against liver damage.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

Plant drugs- This is an age old well known industry manufacturing plant based drugs in traditional systems of medicine such as Ayurveda, Siddha, Homeopathy etc.

- Nutraceuticals- This is a sun rise industry with a large potential for small and medium enterprises.
- Herbal pesticides- This enterprise has enormous potential in future.
- Herbal chocolates, sweets etc.- Sugar free sweets, drinks etc are being marketed internationally. Use of herbal extracts in food products is not a new idea.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

## Use of Medicinal Plants

- Seeds: Production and marketing of quality seeds of high yielding varieties (seed companies).
- Plant parts (leaf, bark, root, seed etc.)- Enterprises such as large scale cultivation as an agro-industry, marketing of dried plant parts (crude drugs) in national and international markets, establishing market net works can be started.
- Grading of specific plant parts such as leaves of senna, roots of ashwagandha/ safed musli/ long pepper etc.

This is the simplest but economically viable small enterprise that can be established at farm level and can add value to the harvested produce.



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

**Thank You**