

**A.G & S.G Siddhartha Degree College for Arts &
Science (Autonomous), Vuyyuru-521165**

2020-2021

Name of the event: Guest Lecture

Topic: "Medicinal plants and their uses"

Date Conducted: 11/01/2021

Name and designation of the resource person : R.Venu Madhav , S.S &N College,
Narasarao peta.

Report on the guest lecture:

1. Objectives: A medicinal plant is any plant which, in one or more of its organs, contains substances that can be used for therapeutic purposes or which are precursors for the synthesis of useful drugs.

2. Notes on lecture: Medicinal plants are regarded as rich resources of traditional medicines and from these plants many of the modern medicines are produced. For thousands of years medicinal plants have been used to treat health disorders, to add flavor and conserve food and to prevent diseases epidemics.

When a plant is designated as medicinal, it is implied that the said plant is useful as a drug or therapeutic agent or an active ingredient of a medicinal preparation. Herbal medicines are in great demand in the developed as well as in the developing countries for primary health care because of their wide biological and medicinal activities, higher safety margins and lesser costs.

3. outcome: Medicinal plants, also called medicinal herbs, have been discovered and used in traditional medicine practices since prehistoric times. Plants synthesize hundreds of chemical compounds for various functions, including defense and protection against insects, fungi, diseases, and herbivorous mammals

Name of the Event: One day National Webinar

Topic: “Arbuscular mycorrhizae A potential Eco - friendly tool for Sustainable Agriculture.”

Resource person : Dr.K.AMMANI.fro.in Botany and Biotechnology, ANU, Guntur.

Date: 7th February, 2021.

Report of the lecture:

Arbuscular mycorrhizal fungi (AMF) are obligate biotrophs that live in symbiotic association with plant roots. They are among the most widespread soil microorganisms that provide the host plant with nutrients and protection against pathogens. Modern agricultural practices such as frequent tillage, high employment of inorganic fertilization and pesticides along with changing climatic conditions due to global warming have enormous impacts on AMF colonization, interaction with plants and crop productivity. AMF positively affect plant tolerance to biotic and biotic stress, harsh ecosystems and their pathogens by altering root structure, exudation, rhizosphere micro flora, production of antifungal and antibacterial, and by competing with pathogens by absorbing nutrients. Therefore, they play an important role in plant growth, productivity and quality. Furthermore, the effect of a fungicide varies depending on its mode of action and the associated AMF species, suggesting that these fungi have great potential as a tool for organic sustainable agriculture in the current global warming scenario.

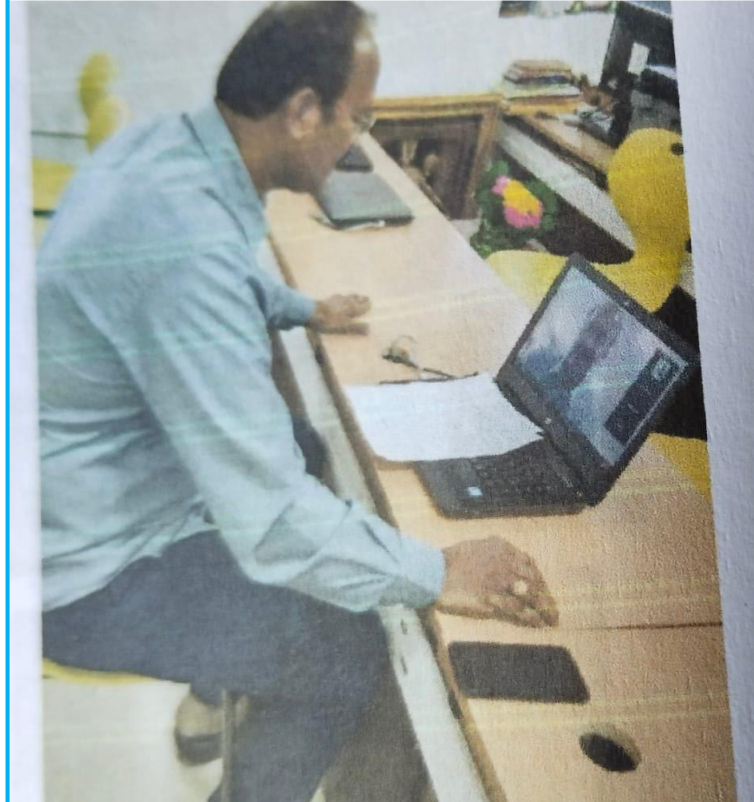
Conclusion: Modern sustainable agriculture demands for a low – input and more nature – based system having role of soil loving microorganisms that are able to accelerate plant nutrition, health and soil, quality, also under stressful environments. All of these demands are being fulfilled by AM fungi. Its use in increasing food production is far and wide. Therefore, is a

better tool for modern sustainable agriculture particularly as biocontrol agent. Encouragement of AM as a tool for sustainable agriculture usage is of immense importance.

The primary focus of future research should be on the identification of gene products controlling the AMF mediated growth and development regulation under stressful cues. identification of both host as well as AMF specific protein factor regulating symbiotic association and the major cellular and metabolic pathways under different environmental stresses can be hot areas for future research in this field.



Welcoming report about webinar



Principals report about webinar