

## Editorial

# A Nobel Prize on Traditional Medicine in 21st Century: Need a new look on Indian Medicinal plants.

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When the western medicines ruled over the pharmaceutical products that is when the synthetic compounds engulfed the market, Tu Youyou from China was awarded Nobel Prize in the year 2015 on Medicine and Physiology for discovery of antimalarial drug “Artemisinin” from the herb *Artemisia*. It is not only one of the major breakthrough of scientific discovery of 21st century, but a changing thought of science on natural products. Tu Youyou’s Nobel prize has drawn the attention of the world community to the rich storage of medicinal plants in global south. India, which has thousands of years of glorious golden script on herbal preparations even as life saving drug, turns into a new momentum of medicine and human health research. The medicinal plant “*Artemisia*” has been known for medicinal use in India for yores too. The tribal communities of the eastern part of Arunachal Pradesh (Tirap, Loning and Anjaw districts), have been using this plant for prevention of malaria for centuries. This indigenous knowledge is as old as their social existence, languages that has been continuing as folk lore and being passed on from generation to generation. Probably, no body from India came forward with such dedication even during post-independence period to look for such precious materials of North East India in search of a gift to the humanity. Some of the medicinal plants being used by the people of north east India are, *Coptis teeta*, caterpillar fungus, *Dysoxylum alliarium*, Ashoka plant (*Saraca indica*), *Andrographis paniculata*, *Polygonum hydropiper*, *Plumbago rosea*, *Cynoglossum zeylanicum*, *Lasia spinosa* and many more. Some are very common while, some others are used to treat specific health disorder after proper diagnosis. It is believed that, a proper approach of biomedical research of these natural resources

shall yield results, which will benefit the mankind of the world. The ancient literature never described the mode of molecular mechanism of action of this plant extract. Modern scientific thoughts believe on how and why of a particular medicine. The modern scientists in laboratory get blind looking at its mechanism of action in the target tissue. Where should we go...? We will get new window of discovery of system biology and cross talk of cellular components. How the natural products from plants interact with various molecular components of cells and signal for final regulation of cell functions in proper track. India never had lack of talents for such discovery, however, there is a need to find out the reason for the failure of the cause. There are hundreds of medicinal plants mentioned in various thousands of years old ancient Indian literature for medicinal use. The Government of India has established the Ministry of Ayush to foster Indian Medicines and its practices as well as promote learning and research on various Indian traditional medicine systems like Ayurveda, Siddha, Unani where extensive herbal medicines are being used. Present day scientists’ self confidence, dedication and a proper forum for execution of the research could be the primary requirements for such epoch making discovery in any country of the world. Scientists need their freedom of thought and process of execution. Government of India’s New Education Policy has brought the advantages for the young researchers to start their research career at an early stage of academic career. For the young researchers, job security and financial strength at base is the priority to settle them in life. Whenever, such an environment is created in any institution, an excellent research outcome is inevitable.