



“Knowledge speaks, but wisdom listens”

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<p>Review Meeting In This Issue</p> <p>Orientation Training to the lectures of VHSE</p> <p>Precision agriculture for innovative agriculture</p> <p>Indian jasmine may be next-generation painkiller</p>	<p>A review meeting was held on 11th may. Dr.FMH Khallel, Dr Zakir hussain, Dr E V Nybe, Dr Hassena Bhasker (Associate professor of COH Vellanikara) attended the meeting. Altogether 12 persons attended the function. A review of all the programmes especially the plans for launching the website of Kerala Agriculture University was discussed in detail.</p>	<p>An orientation programme was conducted for the lectures of VHSE on 14th June. Almost 34 lectures from various Vocational Higher Secondary schools attended thfunction. The purpose behind this programme was to design Finishing school for VHSE(agriculture) certificate holders</p>
<p>Puffer species found</p> <p>Azolla cultivation</p>	<p>Precision farming for Innovative Agriculture</p>	
	<p>Precision farming or precision agriculture is a farming concept based on observing and responding to intra-field variations. Precision agriculture is about whole farm management in which inputs are preserved while returns are optimised. It relies on new technologies like satellite imagery, information technology, GPS, GIS etc. It is also aided by farmers’ ability to locate their precise position in a field using satellite positioning system. Precision agriculture aims at bringing improvements in the following fields of crop science: Farming practices are matched with crop needs, protection, Reduction of environmental pollution, Economics, by boosting competitiveness through more efficient practices (e.g. improved management of fertilizer usage and other inputs). Precision agriculture provides the following information increases decision-making, greater traceability, marketing of farm product, enhance the inherent quality of farm products (e.g. protein level in bread-flour wheat). Precision agriculture uses Global Positioning System. (GPS) - use satellite signals to precisely determines position on the globe Geographic Information System- (GIS)- software that makes sense of all the available data and Remote sensing.</p>	

Indian Jasmine may be next-generation painkiller

Familiar garden plant crepe jasmine, whose flowers are widely used as offerings in poojas and other religious ceremonies, harbours a compound in its stem that has the potential to turn the medical world

A team of US scientists has artificially synthesised a compound in bulk quantity originally isolated from the bark of crepe jasmine in 2004. Preliminary analysis carried out in the laboratory showed that the plant-derived compound, conolidine, has significant pain-relieving properties, which are as good as morphine but without its adverse effects.



In various models of pain studied in the laboratory using mouse, the synthetic compound performed spectacularly, suppressing acute pain and inflammatory-derived pain, 2 key measures of efficacy. The synthetic molecule passed easily through the blood-brain barrier, and stay at relatively high concentrations up to four hours after injection in the brain and blood, which is a testimony to its potency.

Puffer species found



A Puffer fish species (*Tetraodon leopardus*) which is larger in size than the commonly found ones, have been reported from Thattaveli in Muvattupuzha River.

The recently found one is seven to nine times larger than the common variety, said K. V. Zeena, Assistant Professor of Maharaja's College, Ernakulam.

The species was collected as part of her doctoral studies, she said..

The species has brown colour on the dorsal and silvery white on the ventral sides with small yellow fluorescent spots extending up to the caudal fin. The species can be used as ornamental fish.

Azolla cultivation

Azolla is a fresh water green algae. It is highly nutritious so it is mixed with cattle feed and poultry feed and applied. Nowadays this fern has found a place in human diet, it is used to make eatables like azolla cutlet.

Azolla is always found in symbiotic association with anabena. Anabena has heterocysts in its body walls which convert atmospheric nitrogen into ammonia. This nitrogen is utilised by azolla for its growth. But when azolla decomposes the nitrogen goes into the soil, that's why we grow it along with crops like paddy. It also provides phosphorous, iron and potassium to soil. Azolla can be grown as both sole crop and companion crop.

If it grown in companion cultivation with rice, then after 10 days we should apply 500kg azolla@1 hectare in fields. After 20 days azolla will grow, then we should drain water completely and then stamp and incorporate into the soil.

Refill again with water so that rest of azolla grows. After 30 -40 days repeat the same procedures. This step s can be continued till panicle emergence. Each time we continue the process it incorporates 20 kg nitrogen into the soil.

Through the above practices weed growth is also controlled. Azolla is also used as a feed for worms used in vermin composting, it increases the nutritional quality of compost. Azolla also increases gas production in biogas plant. Azolla is mixed with cattle feed and given which increases milk quality.