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To
The Editor,

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Sir,

I request that the following matter may kindly be published in your esteemed daily:

TNAU Scientist bagged TNSC Award

Tamil Nadu young women scientists award is given to young women scientists aged below 40 years who have carried out outstanding research in Science and Technology of different disciplines.

This year the Young Women Scientist Award in the discipline of agriculture sciences was given to the Dr. K. Sathiya Bama, working as soil scientist in the Department of Agronomy, Tamil Nadu Agriculture University (TNAU), Coimbatore for her contribution in the in the field of developing organic fodder production technologies, exploitation of forage crops for environmental safety and other important contribution made in the new Cauvery delta zone soil. For organic milk production, developing a package for organic fodder production is important.

Hence she worked to meet out the requirement of most forage farmers of Tamil Nadu and identified suitable organic farming package for important multicut fodder crops *viz.,* Cumbu Napier Hybrid Grass- CO(CN)4, Lucerne-CO1 and Multicut Fodder Sorghum-CO(FS)29. For CN hybrid grass the basal application of farm yard manure @105 t/ha+ 2 kg *azospirillum*+2 kg *phosphobacteria,* for lucerne crop, poultry manure applied @ 2.0t/ha +398 kg of rock phosphate + 2 kg *rhizobium* +2 kg phosphobacteria and for multi cut fodder sorghum, poultry manure application @20 t/ha + 2 kg *azospirillum*+2 kg *phosphobacteria* are the research outcome of the research.

She also found the major nutrients available in the soil which were depleted drastically after completing three year period of forage crops cultivation. She suggested that if forage crops are recommended for cultivation, the fertilizer schedule has to be restudied especially the potassium was heavily mined from the soil. Moreover the cumbu napier hybrid grass is a voracious feeder of nitrogen, iron and sulphur, so these nutrients have to be recommended with required dose to grass type fodder crops.

In the exploitation of forage crops for environmental safety, she worked on recent problem of green house gas effect and the ways to reduce one among the green house gas

CO_2 by sequestering carbon through cultivation of forage crops. The perennial forages are known to reduce carbon due to their extensive root systems and adding organic matter to the soil. Despite its lack of annual tillage for its establishment which slows the breakdown and release of carbon from the plant roots. From the research, she found that the total cumulative CO_2 removal by the Cumbu Napier hybrid grass was 253.35 t /ha for the period of three years and also derived a formula for predicting the carbon sequestration through Cumbu Napier Hybrid grass. From the prediction equation, the total carbon credit benefit would be around Rs 12,668/ha as remuneration, if farmer is registered under carbon credit programme in future. She also worked as a nutrition chemist in developing important legume fodder- Lucerne variety (CO2) with high green fodder yield, high crude protein and less fibre content and another variety in multicut fodder sorghum (CO31) with less HCN and non shattering inflorescence during the year 2013. Other contribution in the field of agriculture is, development of digitized soil fertility map for Soil and Water Management Research Institute farm, Thanjavur by using MAPINFO software.

She also contributed to the findings of long term fertility experiment research in rice-rice cropping sequence at New Cauvery Delta, Thanjavur, i.e., maintenance dose of P is sufficient and high dose of K application is essential to get sustained rice yield for balanced soil nutrient supply. Contributed to fine tune the SSNM technology of potassium application from 80 kg to 90 kg K_2O / ha effectively and made propaganda at New Cauvery Delta zone by conducting 108 adoptive trials. She identified suitable organic nutrient management practice for sustained the rice production and soil fertility in the New Cauvery Delta Zone. Considering all of her achievements to the field of soil fertility the National Environmental Science Academy awarded her the Junior Scientist of 2004 award.

In recognition of her research work science city confers on Dr. K. Sathiya Bama the prestigious Tamil Nadu Young Women Scientist Award for the year 2013 in the field of Agricultural Sciences.

The award ceremony was organized on Feb. 26, 2015 as Chennai science festival 2015 at Queen Mary's College, Kamarajar Salai, Chennai. The secretary to the Department of Higher Education Ms. Apoorva, I.A.S. distributed the awards in the presence of Thiru U. Sagayam, I.A.S. and Dr. S. Muthukumaran, Chairman, Chennai science festival 2015, Science City.

Public Relations Officer