

## *A Summary Report*

*On*

### NATIONAL SEMINAR ON ANCIENT INDIAN AGRICULTURAL TECHNIQUES AND GREEN VEGETATION

(HELD AT NUZVIDU ON 27<sup>TH</sup> & 28<sup>TH</sup> AUGUST 2011)

With the divine blessings of Sri Sri Sri Ganapati Sacchidananda Swamiji, the two day national seminar was jointly organised by the Institute of Scientific Research on Vedas- (I SERVE) , Hyderabad and S.G.S Gyanabodha Sabha, Nujiveedu at Sri Datta Ashram, on the occasion of 'Ashtama Chaturmasya' (Eight yearly austerity) of Sri Sri Sri Datta Vijayananda Theertha Swamiji.

#### **Objective of the Seminar :**

- To create awareness in ancient agricultural techniques on conservation of soil fertility, field protection etc., with indigenous plant protection practices.
- To create awareness about natural pesticides and fertilizers, for better crop yields.
- To create awareness about the medicinal and nutritional the values of the foods produced for building a better healthy society.

Our motherland, India, is dependent primarily on agriculture and agriculture contributes to more than half of the gross income of our country from time immemorial. Hence, this conference is arranged to reiterate the contribution of Vedas to scientific agricultural methods. Recent studies in the field of agriculture have substantiated the fact that the present day agricultural methods were already elaborately mentioned in the Vedas. It is rather unfortunate, that they did not see the light of the day.

Continuous efforts of various scientists have led to the discovery of ancient books such as '*Krishnaparasuram*' - dating back to 1<sup>st</sup> Century,BC ; '*Vrikshayurvedam*' of 11<sup>th</sup> Century A.D. etc. Prior to this, 'Agriculture' was mentioned in detail in the *Rigveda* and the *Agnipurana*. It was also discovered from such ancient scriptures that the present '*Green Vegetation*' method and several other modern agricultural methods can be traced back to the periods 'Before Christ'.

This discovery has inspired I SERVE in two ways:

1. To pursue the research on Ancient Indian Agricultural techniques more extensively and
2. To create a platform to provide better understanding of Ancient Indian modern Agricultural practices.

Thus, the fundamental aim of this conference is to create awareness among the farmers, women and youth that the agricultural yield and productivity can be improved by implementing various methods mentioned in the Vedas. It was also aimed to make them understand that the diverse soil-conservation practices, methods for retention of medicinal value in agricultural products, application of indigenous plant protection processes against pests, were discussed in the ancient Vedic scriptures.

The seminar has enthralled a large audience of research scholars and more than 300 farmers who participated with undivided attention till the end.



The programme started at 10.00 am on 27<sup>th</sup> August, with the '*Jyothi Prajwalanam*' by **Pujya Sri Datta Vijyananda Teertha Swamiji**.

I-SERVE Chairman, **Prof. Sri K.V Krishnamurthy** presided over the Seminar and rendered the inaugural speech. He elucidated that this conference would influence the farmers, women and all sections of the society.



On this occasion, Pujya Sri Datta Vijayananda teertha Swamiji has released a titled '***Science and Spirituality***' - published by I-SERVE and emphasized the need for conducting more such seminars for the welfare of the society, in his speech.



The seminar journal was released by the chief guest **Prof.Sri C. Rama Kotiah-M.L.A., Nujiveedu**. He addressed the problems faced by the farmers and felt that this session would enable them to improve their farming techniques.

**Dr. C.H. Srinivasa Rao**, a principal scientist from Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad who represented his director stressed on the fact that the modern Agricultural Research methods that are being practiced are derived from the Vedic texts.

**Prof. Mohan Ramanan** from the Central University of Hyderabad, and, the President of Sunflower oil Farmers Association, **Sri P. Subba Rao** have appreciated the goals and sincere efforts of the seminar.

Technical Sessions have started from 12.00 noon, after the Inaugural session and a tea break.

**Dr. S.L.Chowdari** from Udaypur (Rajasthan) spoke on Ancient and Medieval plant protection practices. He explained that the various methods cited in the ancient '*Vruksha Ayurveda*' can be followed in the present era too, to protect and eradicate plant diseases. He quoted a number of sentences from Vedic period *Kautilya Arthashastra* (300 B.C.) and some documentation from medieval and pre-medieval periods as evidence. However, he indicated that *Surapala* (1000 A.D) has written about plant protection in a very systematic manner, right from the seed treatment to the storage of grains. Therefore, he said, that this may be considered as the starting point for a systematic plant protection in Indian Agricultural history.

Further, he elaborated on various types of diseases of the trees. He said, all kinds of trees are prone to internal and external diseases and the causes of internal diseases are Vata, Kapha and Pitta and the external diseases are caused due to cold weather, insects, frost, scorching heat, water, stress etc., .

*Acharya Surapala* has explained seed treatment for the various infections and diseases, in his treatise '*Vrikshayurveda*'. Similarly, many indigenous practices – like Buttermilk, Curd, Asafetida, Ginger, Turmeric, Sugarcane, fuel wood ash etc., were prescribed for protection of plants from pests like termites, stem, borers, thrips, aphids, whitefly viruses etc. *Dr.Chowdari* said these methods are currently being practiced in Semi-arid lands – like Rajasthan. He also narrated various propositions from '*Vrikshayurveda*' and '*Vrikshayavallabha*'. He talked about protection of age old plants in scientific way. He suggested the use of some local waste materials like cow dung, urine, milk, jaggery, honey, plant ash, neem leaves, seed, neem oil & cakes for some of the diseases of the trees and they can be used as fertilizers to improve soil production and plant protection.

**Dr. Rupali Deshmukh** from Pune described her research work on Tomato cultivation as per the book *Vrikshayurveda*. She spoke on the application and standardization of ingredients what is called as '*Kunapajala*- (organized manure and pesticide)' on tomato cultivation. She summarized that the treatment had positive effects on plant growth, flowering, fruiting etc.,

'Kunapajala' is a liquid fertilizer and found to be useful in quantitative and qualitative aspects of Tomato cultivation.

**Dr. Bhaskarachari**, Senior Scientist from NIN, spoke on "food values and health" in the second technical session. He stated that 17% of the global population and 456 million people are poor and they can keep fit by themselves by the right choice of food and right eating habits. Nutrition security is very important and many times there is a problem in choosing the right kind of food due to floods, famine, cost and non-availability of food. Many vitamin A,B, D,E deficiencies are observed in children, adolescents, pregnant ladies, lactating ladies and varied people. He told that the traces of minerals like Iodine, Iron, Zinc and others are also increasing in human population. He restated that, proper choice of food we eat, and good food habits will result in a healthy Nation.

Next speaker was **Dr.Sunil Khandelwala** from Udaipur. He spoke about Bio-gas manure as a substitute to organic fertilizers and for various other purposes. He said that in ancient periods cow dung was used as source of fuel and fertilizer. He explained the meaning and stressed on the usage of the '*Panchagavya*'. It means a mixture of five cow products namely milk, curd, ghee, urine and dung. He explained that the inorganic material that are widely used presently are adversely affecting the soil and the addition of FYM (Farm Yard Manure) crop residues, Bio-gas manure, and vermin compost help improving soil fertility. He also told about NBMMP(National Bio-gas and Manure Management Programme) which is proposed by Ministry of New & Renewable energy. He elaborated on the meaning and content of Bio-gas manures, its nutrient composition, hygienic aspects etc., He discussed in detail about the different types of Biogas plants, the different feeding materials for the plant construction, diverting the outcome of the slurry material as manure, urban and rural plant economics and their usages.

Both, **Dr.S.L.Chowdari** and **Dr.Sunil Kandelwala** from Udaipur spoke on the application of 'Kunapajala' for crop health. 'KU' means 'dirty' and 'nap' means 'water'. The preparation of 'Kunapajala' is described elaborately in the verses by Surapala. He says, "The flesh, bone marrow and excreta of the fish, ram, the goats, and other horned animals are stored in an oil pot after adding sufficient husk ". Though this 'Kunajapala' is highly nourishing for trees it is not appreciated as it is a non-vegetarian product. Hence, the preparation of another 'Kunajapala' with Herbal products was described for weed management in modern agriculture. They explained that spraying cow dung water on plants will prevent dehydration of plants. They emphasized that two

important factors like plant protection and proper nourishment play a major role for a healthy yield and effective crop management.

**Dr.B.Vani** from Vanita Maha Vidyalaya, Hyderabad, spoke on 'Agriculture in Astadasa Puranas' in the post lunch session. She said , agriculture played a very important role in providing basic necessities like food and clothing to Humans. And these are derived from plants. The knowledge of plants was quite well known and described well in the Puranas. Crops like Yava, Varihi, Tila, grams, pulses were generally grown in vedic period; Rice gram was mentioned in the Rig-Veda. She gave numerous instances by reciting many Sanskrit slokas from Tithriyopanishad, Yajurveda etc., She also said that Upanishads spoke elaborately about agriculture and the Tithriyopanishad can be considered as the basic text for agriculture boom.

**Dr.Viswanath** from S.V.Sanskrit University, Tirupati, strengthened the dialogue of Dr.Vani, and highlighted the "Agriculture in Rigveda". He said, every country has a unique culture, tradition and heritage. The term 'Arya' used in Rig-veda means –cultivator. This distinguishes the conquerors and natives into classes in those times. He said that all the practices performed in the fields and all the equipments used for different purposes in that vedic period were invoked in the name of God to help us to give food, water, rains –to grow crops and other activities. He narrated numerous Sanskrit slokas of that period pertaining to Vayudeva, Varunadeva, Suryadeva to help us and bless us from various destroyers. He also gave references about trade and commerce and there were prices for selling and buying. Gold was bought and ornaments were used for transaction purpose during this Vedic period.

Various other issues relating to traders and farmers, prevalent in ancient, medieval and modern periods were mentioned and extensively discussed. All these suggestions were very useful to audience and were greatly appreciated.

**Prof.Dr.Srinivasulu Reddy** also translated the speeches to Telugu from English for the benefit of the audience.

The last session for the day was by **Dr.Ravindra** a professor of Govt. Ayurvedic College, Hyderabad. He held exhibitions of more than 150 medicinal plant variants that are beneficial to us for skin care, cough, cold, allergy and so on. A power-point presentation to recognize the various useful plants, flowers and fruits and roots was also given by him. The session came to an end by 6.00 pm on that day, with some interactions after the presentation.

On the next day, 28<sup>th</sup> August,2011, the first session started at 10.00 am.

The first speaker was **Prof.Srinivasaulu Reddy**. His forty years of teaching experience and his own experiences from self-cultivation enabled him to give many valuable practical suggestions to the farmers.

**Dr.Balaiah** from Nuclear Fuel complex of India (Rtd) Hyderabad, explained different aspects of Agriculture as mentioned in '*Bruhasamhita*' in an elaborate manner with interactions.

**Dr.Peramma** (Rtd.) Professor, S.V.University spoke about prevention of nutritional disorders and the importance of food for a healthy living. Various aspects like the reason to eat food, the quantity of food to be eaten, and the consequences of eating improper food were explained in detail. She stated that less food intake would lead to malnutrition, nutrition deficiency and under nutrition. These would further lead to degenerative diseases like diabetes, obesity, cardio vascular disease, cancer, T.B., & HIV. Choice of proper food we take, proper method of eating and proper eating habits help individuals physically, improve their mental capacities and prevent these diseases.

Later, **Dr.S.L. Chowdari** elaborated on various hidden aspects of organic manures and pesticides. He explained the preparation of these by using locally available products in required proportions, the methods of mixing, and the type & quality of equipment used and their consequences. He suggested that various pest control methods, depending on the soil, can be applied using farm wastes, leaf wastes, green manure, dry stalks, gingly stalks and red gram stalks. Other organic wastes such as ginger, jaggary, fish water boma, husk, egg shells, bones, carcasses of animals and other plant products such as neem seed, leaves, oil cakes are also extensively used.

Lastly, **Sri P.V.Surya Prakash Rao**, (aged more than 90) technical Advisor & Director of Priya Foods, Hyderabad, focused on the problems in mango cultivation. He felt that the main problem is mango seed insects. Improper/excessive irrigation leads to faster growth of the crop, quick ripening of the fruit on the tree itself and becomes a difficulty for the trader, transporter and also the consumer, as the fruit loss will also be high. He suggested that we need to have some industries in our country which facilitate storage & preserve the fruits and prevent such fruit loss.

The audience were very happy and satisfied as all the sessions were very interactive and discussed in detail. The response was very positive and enthusiastic.

**Pujya Sri Datta Vijyananda Teerth Swamiji** promised to execute the various suggestions and activities from the seminar for the benefit & welfare of the

farmers and the society. The Chairman, **Prof. Sri.K.V.Krishnamurthy** concluded the session with an inspiring note. **Dr. Bhagya rao** (Retd.) Medical Education Director, Visakhapatnam was the Chief guest and **Sri Surya prakash**, District Agricultural officer was the guest of honor. At the end, **Dr. Bhagyarao** released the book “ **The Hidden Secrets in Ayurveda**” , published by I SERVE. Mementos were given to all the guests and representatives by the I SERVE Chairman, **Prof. K.V.Krishnamurthy**. The curtain finally was drawn with *Vandana Samparpana* and *National Anthem* sung by members of Nujiveedu Ghyana Bodha Sabha Trust.

### **Suggestions for increasing the agricultural yield :**

1. To conduct ‘Homams’ and ‘Vedaparayana’ in the agricultural fields at sunrise and sunset.
2. To play C.D’s of Pujya Swamiji during afternoons / evenings near the fields. ( these programmes will be organized by Sri Datta Peetham)
3. Training for preparation of ‘Kunapajala’ ) (a) Vegetarian Kunapajala; b) Non-vegetarian Kunapajala
4. New books to be launched to the farmers with latest suggestions and advices.
5. Short-term training classes with the invitation from local farm bodies.
6. Educating the farmers in Cow herding and their benefits in agriculture
7. Distribution of C.D.’s of this conference to all the farmers who have registered their names. (These will be organized by I SERVE).

*-Speeches summary composed by Prof. Peramma*

*-Report by Smt. Savita Sastry*