

NRCP, Kegaon, Solapur Visit Report

A formal visit to ICAR–National Research Centre on Pomegranate (NRCP) was done yesterday on 04th August 2025. Dr. Vineeta Deshmukh (HOD, Samhita Siddhanta and Sanskrit Dept.), Dr. Sandeep Chavan (In-charge ADTSL), Vd. Sharavati Kamble (HOD, Dravyaguna) and Ms. Aishvarya Bhuse (Samhita M.D. Scholar) visited the institute to acquire knowledge about Dadima aka Pomegranate and its availability for the thesis work.

Venue -ICAR–National Research Centre on Pomegranate (NRCP)

NH-65, Solapur–Pune Highway, Kegaon, Solapur, Maharashtra – 413255, India

Date – 04/08/2025, Monday.

Time – 11.15am to 2.30pm

Highlights of the Visit –

The team of BSDT interacted with the team of NRCP on various topics related to Dadima.

Following inputs are given by the scientists from NRCP.

1. We inquired about the Madhura, Amla and Madhura-Amla Variety of Dadima. Mr. Nilesh Gaikwad – processing engineer told that even they also address the varieties of pomegranate as Sweet (for table use), Sour (for making Anardana) and Sweet -sour for products like drinks and wine etc.
2. Dr. Dinesh Babu – Fruit scientist who works on germplasm told that there were two basic varieties of which one has almost on the verge of extinct and all the germplasms were derived from the remaining only one variety. Around 23 germplasms they have developed from the same variety in their germplasm repository. So, there is less chance of genetic modification so far.
3. Mr. Nilesh Gaikwad explained that the varieties which are termed as sweet have acids less than 0.5%, the sweet-sour variety have acids between 1 to 2.5 % and the sour variety have acids more than 3%. The sweet variety is used for eating raw and sour for preparing Anardana. The sweet-sour variety is available in the European markets, not so common to us is used for products like canned juice, pomegranate-based drinks having added sugars. The seeds are used to extract seed oil by cold press method. The center has Korean cold press oil extractor (cost around 8L). The machine can work 2 to 2.5 hours at a stretch without generating heat. It has clothing pads above and below the drum for separation of seeds and filter the oil. (these are the consumable of the machine). This oil is used for cosmetics. Processing scientist / engineer Ms. Namrata told that the fibers remained after

the oil extraction and other products like dried seeds, peels, seed oil etc. can be used in functional food (Bakery products) like biscuits etc.

4. Dr. Ranjan Kumar Singh who is a Scientist in natural farming asked if the comparative study is being done to explore the difference between market variety of Ardraka and our organic cultivated Ardraka. He was keen to know about the study of such naturally cultivated and hybrid and pesticide used varieties. He also informed about the oldest variety of Pomegranate named Wonderful. The one which was used to get fewer selections like No.1, No. 100. No. 100-1 etc. Although the center has the germplasm / plant of this variety which is sour in taste but it only blooms in temperate regions and does not bear flowers and fruits in the center.
5. Asking about the peel availability, Mr. Nilesh Gaikwad said they do use peel for processing but, they need to develop protocol to get rid of the pesticides first or they need to choose the natural farming product. He also shared the contact of the person in Pune who prepares products from pomegranate and can provide the pomegranate peel as well. The person's contact is – **Madan Kulkarni Karvi Producer – Frootsnac – 9850049692**, Anupam Complex, Rahul Nagar, Kothrud, Pune 411038, Maharashtra, India.
6. The identification between the various varieties is a crucial part. They have developed a characteristic key for the same based on their organoleptic characters and others. It is made simple that the sweet variety having minimal acid % has soft seeds where as the sour variety having acid % more than 5 has hardest seeds. The smaller the fruit, the more the sour and the larger the fruit, more the sweeter. Although they have made exception for this by developing the large fruit variety named Solapur Anardana. The taste of this variety is sourer than the tamarind and the size of fruit is large to get more yield.
7. They have also mentioned the Himalayan varieties named Daru (big tree) and Nana (small tree variety that grows only up to 1 meter height). Both are available in their campus. Both bear fruits small up to 1-to-2-inch diameter, become yellowish pink on ripening and tastes sour. The Solapur Anardana variety was developed using the traits from these varieties which has acid % up to 4.8 which is rich in Iron and Zink. Fruit size big like Ganesh variety.
8. There is also another variety from Ramban which is famous for Anardana, they mentioned.
9. Upon asking about the seasonal variation of the fruits they have mentioned that the original season of the fruit comes from Mrig Bahar, i.e. the fruits obtained from the flowers which are bloomed in Mrig Nakshatra. But the farmers and also scientists manipulate the fruiting season by some natural and some chemical pathways to induce Hasta Bahar (flowering in Hast Nakshatra) and Ambe Bahar (flowering along with Mango flowering). The fruits from Mrig bahar will come around October to December. Although they said there can be difference between these fruits but not that observed. These manipulations are based on the markets demand.

10. The principal scientist Dr. Dhumal explained the detailed history about the study of pomegranate varieties that has been brought from Iran, Spain and Russia. Out of which two varieties survived. And further studied. He also mentioned about the project of pomegranate in diabetes. They have also started clinical trials but due to some hindrance it was stopped.
11. They seemed keen to do research work in cancer.
12. Now in Maharashtra we have following varieties –
 - a. Madhura – Arakta, Mrudula, Bhagava, Ganesh, Alandi, Dholka (from Gujrath)
 - b. Madhura- Amla – Wonderful
 - c. Amla – Daru, Nana.Solapur Anardana, Phule Anaradana.
13. Among these Alandi, Ganesh and Dholka are more Indian varieties.
14. The place of Madhura-Amla variety is European Market mainly. We do have some varieties in Madhura-Amla.
15. Dr. Deshmukh and Dr. Dinesh Babu discussed possibility of MOUs between the two institutes. One for Academic purpose between the NRCP and BSDT's Ayurved Mahavidyalaya for Students to study research. And another for purely research in cancer or other diseases, between NRCP and ICTRC.
16. They showed us their processing unit and the instruments. They also showed us their analytical laboratory and the germplasms aka garden having the varieties of plants for selection.

Overall, the visit was very useful and enriching the learning experience in the world of research on single fruit and its various aspects.

BSDT's Ayurved Mahavidyalaya, Wagholi, Pune.

NRCP Visit – 04 August 2025



Daru Variety



Nana Variety