

**FIELD TRIP cum INDUSTRIAL VISIT TO THE DEPARTMENT OF HORTICULTURE, UMSNING
On the 25th SEPTEMBER 2018**

The department of Botany had organized a field trip to the Department of Horticulture, Umsning, Ri Bhoi District, Meghalaya on the 29th September 2018. The place of interest was chosen for the trip so as to enable the students to observe the cultivation of tea and learn about its processing first hand on the field. The place is more than an hour drive south from Shillong. So the day started early where the students assembled in the college premises to travel to the destination. On reaching there, the students first interacted with the Officer-in-charge of the Department of Horticulture, Umsning, Shri. M Marbaniang who introduced them to the three units present in the premises of the tea garden- Plantation, Processing and Marketing. The students were then divided into groups, each under an instructor. The students were first taken to the vermicompost corner where vermicompost, straw and cowdung are processed to be used as fertilizer in the fields. The plantation is mostly of the Assam and Darjeeling tea and hence, the procedure of plantation is exclusively of these two varieties where the square and rectangular method with an in-between distance of 1 m between two plants was followed. After being enlightened with the details of plantation, the students were taken to the uphill sites to observe the plucking of the tea buds by the workers. It was observed that the three-bud method of plucking was used. The students were then taken to the Processing Unit or factory where freshly plucked leaves were exposed for 14-20 hrs to a fan that is turned on to remove the moisture from the leaves. The leaves which then contained only 55-60% moisture were then transferred into the rolling machine, where rolling took about 40-45 minutes in the case of Black tea after which it is transferred into the Fermentation Machine. Tea leaves will produce an aromatic fragrance only after undergoing fermentation. After 3 hours in the fermentation machine, the final processing involved putting the fermented leaves in the dryer for about 95-180.c and converting it into powder. The tea is of two kinds:1. Green tea where after plucking is directly processed to denature enzymes, and 2. Black tea where processing is done the following day of plucking. The students were then taken to the nursery beds where they witnessed the tips of the tea leaves being planted in a row with just a small space in between. When they are big enough to survive, the saplings are then transferred into the open field. The day ended with an incredible amount of learning for all the participants.



Students and Faculty at the Site





Students interacting with the instructor