

**DBT Star Hands on Training**  
**Department of Environmental Science**  
**St. Edmund's College**

**Program: Determination of Germination Percentage and Relative Germination Rate of Seeds (Under DBT STAR College Scheme)**

**Date: 30.08.2022**

**Time: 2pm**

**Venue: Department of Environmental Science Laboratory**

**Teacher: Ms. Larihun Jeengaph**

**No. of students: 14**

**Method: Germination growth test**

The Department of Environmental Science under the DBT Star College Scheme conducted practicals on the Determination of Germination Percentage and Relative Germination Rate of Seeds for the B.Sc. (H) 3<sup>rd</sup> semester students.

Hand-on practice on the determination of Germination Percentage and Relative Germination Rate of Seeds were provided. Students were taught to create metallic stress of  $3\text{CdSO}_4 \cdot 8\text{H}_2\text{O}$  /  $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$  /  $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$  on seeds. The heavy metal toxicity was observed on the germination of seeds and radicle growth. Demonstration was also made clearly for students on how to avoid contamination of seeds and how to handle metal solution carefully.

**Outcome of the Programme**

- Students were able to observe and compare the germination in control condition and in metallic stress.

- The results and observations were discussed based on the environmental significance of on Determination of Germination Percentage and Relative Germination Rate of Seeds