

Sher-e-Bangla Agricultural University
Department of Agronomy
MS in Agronomy Semester-I
Course Title: Crop Physiology and Stress Agronomy
Course code: Agro 506 Credit hours: 3
Lecture schedule

Lecture No.	Date	Topics	Course Teachers
1.		Growth stages of field crops	Prof. Dr. Md. Abdullahil Baque
2.		Agronomic management of optimum growth	Prof. Dr. Mirza Hasanuzzaman
3.		Growth curve, Limiting factors of growth	Prof. Dr. Md. Abdullahil Baque
4.		Plant abiotic stress: Concept and types	Prof. Dr. Mirza Hasanuzzaman
5.		Plant abiotic stress: Consequences	Prof. Dr. Mirza Hasanuzzaman
6.		Interception of solar radiation, extinction coefficient	Prof. Dr. Md. Abdullahil Baque
7.		Salinity stress: Concept, kinds of salinity, occurrence	Prof. Dr. Mirza Hasanuzzaman
8.		Salinity stress: Nature and extent of crop damage, salinity management.	Prof. Dr. Mirza Hasanuzzaman
9.		Drought stress: Concept, nature, causes and kinds of drought	Prof. Dr. Mirza Hasanuzzaman
10.		Class test and Quiz	Mirza Hasanuzzaman
11.		Drought stress: Effect of drought on crops	Prof. Dr. Mirza Hasanuzzaman
12.		Drought stress: Basis of drought tolerance, available technologies to reduce crop losses from drought.	Prof. Dr. Mirza Hasanuzzaman
13.		Physiological and biochemical basis of photosynthesis in C3 and C4 plants	Prof. Dr. Md. Abdullahil Baque
14.		Light stress: Nature and causes of light stress, crop growth, development and yield mechanisms due to light intensity and photoperiod	Prof. Dr. Mirza Hasanuzzaman
15.		Physiological and biochemical basis of photosynthesis in C3 and C4 plants	Prof. Dr. Md. Abdullahil Baque
16.		Light stress: Nature and causes of light stress, crop growth, development and yield mechanisms due to light intensity and photoperiod	Prof. Dr. Mirza Hasanuzzaman
17.		Growth analysis, stem, leaf and root growth.	Prof. Dr. Md. Abdullahil Baque
18.		High temperature stress: Concept, high temperature injuries in plants, adaptation features in plants due to high temperature, agronomic manipulations to mitigate crop losses due to high temperature.	Prof. Dr. Mirza Hasanuzzaman
19.		2 nd Class test and Quiz	Prof. Dr. Md. Abdullahil Baque
20.		High temperature stress: Concept, high temperature injuries in plants, adaptation features in plants due to	Prof. Dr. Mirza Hasanuzzaman

Lecture No.	Date	Topics	Course Teachers
		high temperature, agronomic manipulations to mitigate crop losses due to high temperature.	
21.		Reproduction growth formations, flowering, fruit and seed development	Prof. Dr. Md. Abdullahil Baque
22.		Cold stress: Concept, types of cold shocks, symptoms of cold temperature injuries in plants, management of cold stress in crops.	Prof. Dr. Mirza Hasanuzzaman
23.		Heavy metal stress: Concept, plant responses to heavy metals, plants tolerance to heavy metals	Prof. Dr. Mirza Hasanuzzaman
24.		Histogenesis	Prof. Dr. Md. Abdullahil Baque
25.		Deep water stress: Concept, crop response to deep water stress, characteristics of flood water	Prof. Dr. Mirza Hasanuzzaman
26.		Yield functions	Prof. Dr. Md. Abdullahil Baque
27.		3 rd Quiz	
28.		Yield functions	Prof. Dr. Md. Abdullahil Baque
29.		Yield components and attributes,	Prof. Dr. Md. Abdullahil Baque
30.		Deep water stress: Factors affecting survival and morphological change of submerged plants, management of deep water stress in crops, Soil-water-plant relationships, thermal time in relation to crop Prof. Dr. Mirza Hasanuzzaman	Prof. Dr. Mirza Hasanuzzaman
31.		Harvest index and partitioning	Prof. Dr. Md. Abdullahil Baque
32.		Oxidative stress in plants	Prof. Dr. Mirza Hasanuzzaman
33.		Plasticity of vegetative growth in respect of reproductive growth, duration of reproductive growth, population density, nutrition and other agronomic management for improving yield potential.	Prof. Dr. Md. Abdullahil Baque

Course Instructors:

1. Professor Dr. Md. Abdullahil Baque

2. Prof. Dr. Mirza Hasanuzzaman