



MASTER OF AGROECOTEHNOLOGY
FACULTY OF AGRICULTURE
UNIVERSITY OF BENGKULU

COURSE SYLLABUS

AGT-513: PLANT BREEDING FOR LESS FAVORABLE ENVIRONMENTS

Type of course : Compulsory

Credit unit : 3

Semester offered : 1

Course description

Discuss various plant breeding methods and strategies to increase tolerance to abiotic and biotic stresses

Learning outcome

Able to formulate strategies in developing varieties that have good adaptability to stressful environmental conditions

Course content

1. Overview of plant breeding methods
2. Selection for yield and environment
3. Selection for drought and submergence tolerances
4. Selection for mineral deficiency and toxicity resistance
5. Selection for pests and diseases resistances

References

1. Blum, A. (2018). Plant breeding for stress environments. CRC press.
2. Fritsche-Neto, R., & Borém, A. (Eds.). (2012). Plant breeding for abiotic stress tolerance. Springer Science & Business Media.
3. Niks, R. E., Parlevliet, J. E., Lindhout, P., & Bai, Y. (2011). Breeding crops with resistance to diseases and pests. Wageningen Academic Publishers.