

DEPARTMENT OF BOTANY
Teaching Plan 2021-22
(ODD Semester)
Dr. M.Arunjit Singh

B.Sc. (H.) Botany 2nd Year, Sem III

Core Course Botany –Economic Botany (THEORY)

Name of Paper & Code	Allocation of Lectures	Month wise schedule	Reading suggestions
<ul style="list-style-type: none"> Unit 1.Origin of Cultivated Plants(4 lectures) Unit 2. Cereals (6 lectures) 	10 lectures	August	<ul style="list-style-type: none"> Kochhar, S.L. (2012). Economic Botany in Tropics. New Delhi, India: MacMillan & Co Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer Academic Publishers.
<ul style="list-style-type: none"> Unit 3. Legumes (3 lectures): Unit 4. Fruits (3 lectures): 	6 lectures	August	
<ul style="list-style-type: none"> Unit 5. Sugars and Starches (5 lectures): Unit 6. Spices (6 lectures): 	11 lectures	September	
<ul style="list-style-type: none"> Unit 7. Beverages (4 lectures): Unit 8. Oils and fats (8 lectures): 	12 lectures	September	
<ul style="list-style-type: none"> Unit 9. Essential Oils (4 lectures): Unit 10. Natural Rubber (3 lectures): 	7 lectures	October	
<ul style="list-style-type: none"> Unit 11. Drug-yielding plants (5 lectures): Unit 12. Tobacco (3 lectures): 	8 lectures	October	
<ul style="list-style-type: none"> Unit 13. Fibers (6 lectures): Classification based on the origin of fibers; 	6 lectures	November	
<ul style="list-style-type: none"> Revision 		November	

B.Sc. (H.) Botany 2nd Year, Sem III

Core Course Botany –Economic Botany (Practical)

S.no.	Date		
1.	August	Cereals: Wheat (habit sketch, L.S/T.S. grain, starch grains, micro-chemical tests), Rice (habit sketch, study of paddy and grain, starch grains, micro-chemical tests). Millets and Pseudocereals (specimens / photographs and grains)	Kochhar, S.L. (2012). Economic Botany in Tropics. New Delhi, India: MacMillan & Co

	September	Spices: Black pepper, Fennel and Clove (habit and sections L.S./T.S.)	Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer Academic Publishers.
2.	September	Soybean, Groundnut, (habit, fruit, seed structure, micro-chemical tests).	
3.	September	Mango (habit sketch, L.S. fruit, micro-chemical tests in ripe fruit); Citrus (habit sketch, T.S. hesperidium, W.M. vesicle, micro-chemical tests including test for vitamin C)	Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer Academic Publishers.
4.	October	Sugars and starches: Sugarcane (habit sketch; cane juice-micro-chemical tests); Potato (habit sketch, tuber morphology, T.S. tuber to show localization of starch grains, W.M. starch grains, micro-chemical tests).	Kochhar, S.L. (2012). Economic Botany in Tropics. New Delhi, India: MacMillan & Co
5.	October	Tea (plant specimen, tea leaves), Coffee (plant specimen, beans).	Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer Academic Publishers.
6.	October	Coconut- T.S. nut, Mustard—plant specimen, seeds	Kochhar, S.L. (2012). Economic Botany in Tropics. New Delhi, India: MacMillan & Co
7.	November	Habit sketch of Rosa, Vetiveria, Santalum and Eucalyptus (specimens/photographs).	Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer Academic Publishers.
8.	November	Rubber-specimen, photograph/model of tapping, samples of rubber products	Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer Academic Publishers.
9.	November	Specimens of Cinchona, Digitalis, Papaver and Cannabis (male & female plant).	Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer

			Academic Publishers.
10.	November	Tobacco: specimen and products of Tobacco. Fiber-yielding plants: Cotton (specimen, whole mount of seed to show lint and fuzz; whole mount of fiber and test for cellulose), Jute (specimen, transverse section of stem, test for cellulose and lignin on transverse section of stem and fiber).	Kochhar, S.L. (2012). Economic Botany in Tropics. New Delhi, India: MacMillan & Co
11.	November	Fiber-yielding plants: Cotton (specimen, whole mount of seed to show lint and fuzz; whole mount of fiber and test for cellulose), Jute (specimen, transverse section of stem, test for cellulose and lignin on transverse section of stem and fiber).	Wickens, G.E. (2001). Economic Botany: Principles & Practices. The Netherlands: Kluwer Academic Publishers.