

THE ROLE OF EQUIPMENTS AND ADVANCED TECHNOLOGY IN HORTICULTURAL RESEARCH

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Today horticulture is one of the most important economic sectors of the world; besides its importance is increasing every day. Researches, done during the last century especially those carried out during 1970 to 2000 had a substantial contribution to the horticultural development. Creating new technology by horticultural researchers and its application in various sections of the industry leded to increase horticultural products and their consumption. Among those technologies are pesticides and other chemicals, plant hormones, mechanization and mechanical machines for preharvest, harvest and post-harvest, technology of horticultural products transportation, storage and processing as well as most important one releasing the new varieties based on consumer and market demand and incorporating bio_ technology. In order to achieve horticultural objectives it is necessary to consider on both basic and applied researches. This is obvious that a substantial progress in horticultural industry was based on such research activities. In the other hand, paying attention to carrying basic research with using advanced equipments facilitate testing precise hypothesis and achievement of objectives, saving time and investment and manpower as well as increasing the application possibility of the research results. This is obvious that researchers are able to achieve important results using simple equipments, but in horticultural research access to the advanced equipments is essential to test complicated quality and quantity aspects of the products. The objective of present paper is to discuss the role of equipments and advanced

diameter and moisture in work shop of agricultural engineering group of IROST and to obtain the confidence of machine's operation, strength and firmness of parts against forces, then, planning machine for performing the practical test and showing the operation, placed on the authority of green space organization of 14 district Tehran municipality, center of Alburze, breeding silkworm in Iran.

During a few days work in above mentioned centers, the set without any problem or trouble in its systems and mechanisms succeed to splinter the wood and various plant of the top branches of tree and had obtained necessary success in different processes of practical work.

During 150 hours work and operation of splinter the wood by chipper machine, control and examination of the different parts of set is done. During the control of the set, we observe that the all parts and various system of that have a complete safety and have sustained no injury that this task is the sign of strength and firmness of the various parts of the set against the forces and finally confirm the correctness and acceptability after the various processes of assessment, wood chipper is ready to pilot production.

■ specifications of wood-chipper Machine:

- Dimensions: Length 200 cm, Width 150 cm, Height 250 cm.
- Weight: 650 kg.
- Mounted on tractor.
- Power Requirement: 30 hp.
- Ability of starting the set with coupling the set with electromotor / using the tractor force(P.T.O).