Aims
&
Objectives
The complex process of photo control of seed germination had been an interesting field of research. It began in the late 19th century with Caspary, Kinzel, Flint, Mc Allister and carried to the present day processes and literally to a revolutionary stage in the works of Amaral, Takaki, Amritphale, Gutch & Hsiao (1993) & others. The pressure of population on land and the increased demand to feed more and more human mouths coupled with the agrarian revolution to meet the increased demands and the renaissance in science attracted increased interests in the study of the process of germination to manipulate it to the advantage of the farmer and the society at large. This increased interests in the study and rather complex and complicated process of germination prodded scientists into researches on various enzymes which would metabolise carbohydrates, proteins and lipids, the reserve materials of seeds. These studies ultimately disseminated vital information to farmers and agriculturists to create an environment most conducive for seed germination. Plant and plant products are now not only food material but products of nutrition and energisers during sickness and convalescence. If the interference in the seed germination could alter the ratio of reserve food materials in seeds to the advantage to the human beings will be of great significance in the context of under nutrition in the developing countries. This is conceived to be achieved by subjecting the germinating seeds to stresses. Under 'suitable' stress more protein may take place to combat the stress condition since nutritional starvation is more frequent than energy starvation, a bias towards more proteins in germinating seeds, by way of inter conversion of reserve food materials of seeds before they establish photosynthetically, is highly useful. Thus the metabolism of seeds under normal and stress condition attained
not only scientific but economic importance too. Thus the reaction of seeds to light became intensively investigated over the years.

The present work is an attempt to study the bio-chemical changes under light stress with special emphasis on asparaginase activity, amylase activity and lipase activity of the germinating seeds of green gram and horse gram belonging to the pulses family. Changes in the total protein content of germinated seedlings were also studied.