**IAPTCPR Background**

Research on plants enriches our intellectual life and adds to our knowledge about other life processes. The results of research on plant systems also can teach us how to approach problems in agriculture, health, and the environment.

Plant Research appears to have had originated as far back as the Stone Age. Early man's interest may have been simply to learn what different herbs and plants could be used as food. This could be seen as an early and basic form of plant classification, grouping them as edible and inedible.

Plant tissue culture plays an important role in the field of fundamental research, conservation, and production. Studying plant morphogenesis and plant physiology requires the ability to grow plants in vitro and plant tissue culture techniques provide the best way to accomplish this.

Plant tissue culture is applied in the area of plant physiological and biochemical research to study the cell cycle, metabolism in cells, nutritional, morphogenetical and developmental studies in plants.

Plants provide food and oxygen for the entire biosphere, literally supporting the existence of life on Earth. They also provide shelter, fiber, fuel, and medicinal compounds that profoundly affect mankind.

Finding new ways to produce enough nutritious food for a growing world population. Breeding plants to tolerate the heat- and drought-stress caused by climate change. Developing sustainable cropping practices to produce healthful food while protecting the environment. Investigating new methods to fight plant diseases.