2. AIM AND SCOPE

The present study plants available on a good number of medicinal constituents that indicate the phytochemicals can be promisingly utilized for many human health related problems including inflammation, ulcer, cancer and infectious diseases. The continued investigation into the secondary plant metabolites for anti-infective agents has gained importance because of the alarming increase in the rate of resistance of pathogenic microorganism to existing antibiotics. We still depend on herbal medicine because of the side effects of the most of the modern drugs. So the commonly available vegetables with high medicinal values were selected for the present research. Many synthetic antioxidant components including terpenoid compound produce toxic or mutagenic effects, which have changed the attention towards the naturally occurring antioxidants. The work entitled “Investigation on phytochemical screening, isolation and characterization of terpenoid compound from Daucus carota L. and its incorporator effect on to Solanum lycopersicum L.” was planned to achieve the objectives.

➢ The collection of plant material - Solanum lycopersicum and Daucus carota.

➢ Phytochemical screening of Daucus carota.
  • Identification isolation and purification of terpenoid compound by TLC and Column Chromatography from Daucus carota
  • Structure confirmation by UV, IR
  • To infuse the isolated terpenoid on to Solanum lycopersicum.

➢ Post infusion growth analysis of Solanum lycopersicum
  • To examine growth measurement on both control and infused plants,
  • To examine harvested fruits (Control and Treated),
• Phytochemical analysis of control and treated fruits,
• Phytochemical screening of second generation plant,
• Proximate analysis of control and treated plants.

➢ *In-vitro* pharmacological activity of *Solanum lycopersicum* (control plants and infused plants) such as,
• Antioxidant activity,
• Anti diabetic activity,
• Antimicrobial activity.