Studies for flora diversity on heritage buildings and surface treatment for preservation under "Creation of centre of excellence on conservation of Indian heritage structures" (GAP -311)

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**Abstract:** Vegetation plays a vital role in life cycle of living organism whereas the growth of vegetation on historic structure, buildings and monuments can cause serious damage. The types of vegetation that commonly growing on the building and caused damages are *Ficus* or figs, ferns and microscopic organisms (algae, mosses and fungi). All plants that grow on buildings attach themselves to the structures in some way. The chemical action softens the underlying wall material and provides a pathway for the plant to insert a portion of itself into the brickwork/wall. The presence of biological growth on buildings often provides a useful indicator of excess moisture, and investigation about nature with extent of growth can highlight defects in the structural of buildings. In tropical climate condition, the growth of vegetation over the historic structures causes quite serious problems as compared to a non-tropical climatic condition. Small plants may not cause serious damage to the masonry, but all the woody rooted vegetative growth damages the structure; hence should compulsory be removed.

## **Objectives:**

- Taxonomic identification of flora diversity from old/heritage buildings.
- Control/treatment of vegetative growth on heritage/old buildings