**Water pollution indicator plants**

1. *Utricularia graminifolia*: is a small perennial carnivorous plant that belongs to the genus *Utricularia*. It is native to Asia, where it can be found in Burma, China, India, Sri Lanka, and Thailand. *U. graminifolia* grows as a terrestrial or affixed subaquatic plant in wet soils or in marshes, usually at lower altitudes but ascending to 1,500 m (4,921 ft) in Burma.

2. *Chara*: is a genus of green algae in the family Characeae. They are multicellular and superficially resemble land plants because of stem-like and leaf-like structures. They are found in fresh water, particularly in limestone areas throughout the northern temperate zone, where they grow submerged, attached to the muddy bottom.

3. *Wolffia*: is a genus of 9 to 11 species which include the smallest flowering plants on Earth. Commonly called watermeal or duckweed, these aquatic plants resemble specks of cornmeal floating on the water. *Wolffia* species are free-floating thalli, green or yellow-green, and without roots.

**Soil Pollution indicator Plants**

1. *Psoralea*: is a genus in the legume family (Fabaceae). Although most species are poisonous, the starchy roots of *P. esculenta* (breadroot, tipsin, or prairie turnip) and *P. hypogaea* are edible. A few species form tumbleweeds. Common names include tumbleweed (*P lanceolata*), and white tumbleweed.

2. *Andropogon*: (common names: beard grass, bluestem grass, broom sedge) is a genus of grasses. *Andropogon gerardii*, big bluestem, is the official state grass of Illinois.[2] There are about 100 species.

3. *Shorea robusta*: also known as śāl or shala tree, is a species of tree belonging to the Dipterocarpaceae family. Sal tree is also known as Sakhua in northern India including
MP, Orrisa and Jharkhand. Sal is moderate to slow growing, and can attain heights of 30 to 35 m and a trunk diameter of up to 2-2.5 m. The leaves are 10–25 cm long and 5–15 cm broad. In wetter areas, it is evergreen.

4. **Senna obtusifolia**: (Chinese Senna or sicklepod) is a legume in the genus *Senna*, sometimes separated in the monotypic genus *Diallobus*. It grows wild in North, Central, and South America, Asia, Africa, and Oceania, and is considered a particularly serious weed in many places. It has a long-standing history of confusion with *Senna tora* and that taxon in many sources actually refers to the present species.

5. **Geranium**: is a genus of 422 species of flowering annual, biennial, and perennial plants that are commonly known as the cranesbills. They are found throughout the temperate regions of the world and the mountains of the tropics, but mostly in the eastern part of the Mediterranean region. The long, palmately cleft leaves are broadly circular in form. The flowers have five petals and are coloured white, pink, purple or blue, often with distinctive veining. Geraniums will grow in any soil as long as it is not waterlogged.

6. **Impatiens**: is a genus of about 850 to 1,000 species of flowering plants, widely distributed throughout the Northern Hemisphere and the tropics. Together with *Hydrocera triflora*, impatiens makes up the family Balsaminaceae. Common names include impatiens, jewelweed, touch-me-not, snapweed, and, for *I. walleriana* in Great Britain, "busy lizzie", as well as, ambiguously, balsam.

**Air Pollution indicates Plants**

*Lecanora conizaeoides*: is the most tolerant of all lichens to SO₂, thus occurs in city also. Lichens can thus be used as reliable biological indicators of pollution.

**Heavy metal pollution indicators Plants**

*Cladophora*: is a genus of reticulated filamentous Ulvophyceae (green algae). The genus *Cladophora* contains many species that are very hard to tell apart and classify, mainly because of
the great variation in their appearances, which is affected by habitat, age and environmental conditions. The *Cladophora* species can be a major nuisance causing major alteration to benthic conditions linked particularly with increased phosphorus loading.

**Stigeoclonium**: is a genus of algae, in the family Chaetophoraceae.

**Oil pollution Indicates Plants**

*Duniella teritolecta*: is a genus of algae, specifically of interest the Dunaliellaceae. *Dunaliella* sp. are motile, unicellular, rod to ovoid shaped (9–11 µm) green algae (Chlorophyceae), which are common in marine waters. The organisms are relatively simple to cultivate and do not clump or form chains.

**Haptophytes**: The haptophytes, classified either as the Prymnesiophyta or Haptophyta, are a division of algae. The term "Haptophyceae" is sometimes used.\[^1\][^2] This ending implies classification at a lower level. However, although the phylogenetics of this group has become much more understood in recent years, there remains some dispute over which taxon level is most appropriate.

**Mortierella**: species are soil fungi belonging to the order Mortierellales within the subdivision Mucoromycotina (division: Zygomycota). The widespread genus contains about 85 species.