

REFORESTATION Project and ECO-GOLDS implementation

Objective

To reduce the levels of CO₂ generated in the university community by planting trees in specific areas of the campus and implement a program to eliminate contaminating materials (PET, plastic, junk food etc..)

Justification

The carbon cycle of the Earth causes the daily movement of a large part of the carbon contained in the planet. Although the atmosphere is not the only place where we find carbon, as also found in seas, rocks, soil and living organisms. However it is in the atmosphere where the unbalance in the cycle of coal is caused by human activity, which in recent decades it has become dangerous.

The carbon concentration is measured in parts per million (ppm). At more ppm carbon, more greenhouse gases, and the urgency it's to prevent the atmosphere to contain more than 450 ppm, if kept within this limit the average global temperature will not increase more than 2 ° C.

With the implementation of these measures, levels of CO₂ will be reduced considerably as each tree absorbs about 25 kg of carbon emissions each year and even more during they early years of growth, this is in a short term, but long term, in a period of 40 years, a tree absorbs about 1,000 kg of carbon dioxide.

Achieving this goal involves significant reductions in CO₂ emissions limits as close as possible, so it is important to implement a series of measures to offset these emissions through reforestation in specific areas of the campus as parking lot and the access main roads.

The proposal is to plant orange trees, white wood and mesquite, endemic species that favor fruit production considering the food crisis that the FAO predicted, will affect the Third World, on the other hand roots do not affect the pavement and foliage does not require specific care, obtaining multiple direct and indirect benefits, including: contributing to sustainable development of the environment, providing protection from the sun and dust, purify the air, beautify the landscape, paying off outside noise and regulate the temperature not only by the shadow it provides, especially in summer, but because their "breathing" moistens the atmosphere. It also compensates the excess of asphalt slabs and urban concrete that increases the heat. "Through photosynthesis, the tree is our best ally in the fight against global warming," says the French botanist Francis Hallé.

Sowing Location: DICIS Parking Lot

Mesquite Trees *acacia*

- The mesquite gives shade in habitats where other trees do not thrive.
- Being legumes, mesquite makes nitrogen fixation in the soil where they grow.
- Mesquite flowers give nectar to bees.

Oranges

- Provides an excellent fruit.
- These species have a wide top, ideal for shade areas of the garden.
- It is not fussy about soil.
- It is used as a shade tree in small squares and narrow sidewalks.
- Its ornamental value lies in the attractive and bright colors of the fruit, the dense dark green foliage and its fragrant flowers.
- Orange height of 3-5 meters, with compact cup leafy trunk and smooth bark and gray-green.

White Wood *Albizia occidentalis*

- They only need a little water to keep them and survive.
- Used as shade for roadsides, parks and homes.
- Being endemic to the region, is adapted to the climate making it an excellent choice for reforestation.

APPROXIMATE QUANTITIES OF TREES (168 in total)

110 orange trees
42 mesquite trees
16 white sticks trees

AMOUNT OF CO₂ absorbed per YEAR

4200 kg / year (oxygen to 1680 people per year)

ECO-GOLDS PROJECT

ECO-GOLDS project consists of 10 steps aimed at eliminating the use of contaminating materials on campus such as pet and disposable products (water bottles, cutlery, non-organic food packaging) to promote environmentally friendly alternatives that contribute to reduction in CO₂ emissions, which would be applied mainly in cafeteria and invite students and teachers to participate.

Eco-golds

Remove disposable and plastics and Styrofoam in the cafeteria
Promoting use of Thermo
Jug Water Sales
Implementation of a Vegetarian Menu
Information Processing and Fruit Water
Promoting Better Nutrition informing their properties
Sale of Natural Fruits and organic products
Support Local Products
Reducing Meat Consumption
Compost Production (for fertilizing trees)