



Necessary materials and tools:

Potted plants, flue gas, cigarette smoke, nylon sack.

Description of experiment :

a) Pull a nylon sack on to a car's (with working engine) exhaust pipe. Then put the potted plants into this sack. (Beware, the exhaust pipe is hot!)Place another plant in a sack which containes fresh air.Do this experiment outdoors!

b) You can make the same experiment using cigarette smoke. It also shows the harmful effect of smoke produced by a cigarette.

Result of the experiment:

The plants die in a short period of time.

Explanation:

Smoke produced by either flue gas or cigarette does not only smell but is also toxic! Flue gas is the most notable air polluting matter.

They have negativ effects on the development and growth of plants, blocking the photosynthesis.

Flue gas contains: CO_2 , CO, NO_x , SO2, leadon combinates carburetted hydrogen... Smoke by cigarette contains: 70 % organic substances (eg.: nicotine, isoprene, phenol, vinile-chloride, hydrogen-cyanide,) 2-3% carbon, 2-3% other substances, carbon monoxide, arsenic, nickel, chrome, cadmium, lead.