

Natural Air Filters

Alkandari, Dana (School: Qurtoba High School)

Many different kinds of diseases are spreading around the world for example asthma and nose allergies. According to my research, I used 4 samples (Sponge filter, Palm leaf, Palm fronds, Sack of cloth) for purifying the air from components (PM10, PM2.5, VOC, HCHO) which causes asthma and allergy. The results shows how efficient both of Palm fronds(B), Palm leaf(C), that they have the ability of blocking more than 75% of Volatile Organic Compounds (VOC), and 24% of Formaldehyde (HCHO), and Particle matter the size of (2.5 – 10 in diameter). While the air speed decreased between 4-4.5 Knot, then the airspeed decreased less than 2 Knots when the Sponge filter and Clothsack were used.

Awards Won:

National Center Junior Academy of Sciences of Ukraine: UN Sustainable Development Goal Award \$ 500.00