

Electric Nose to Identify Plant Species

TECHNOLOGY DESCRIPTION

This invention is a technology to identify plant species by using blender and signal measurement.

TECHNOLOGY FEATURES

The technology allows odor to adsorb into the gas sensor surface during signal measurement process. Gas sensors will detect odor of the herbs and output voltage from the sensor will be sent to DAQ system. This data are then sent to the computer for classification. The Electronic nose is battery-operated and rechargeable. It functions with circuit design of sensors and blender.

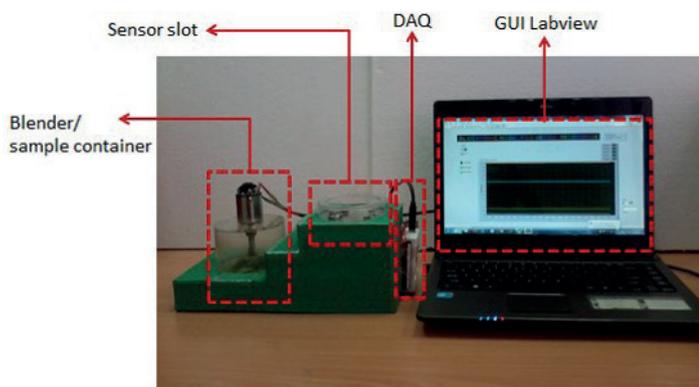
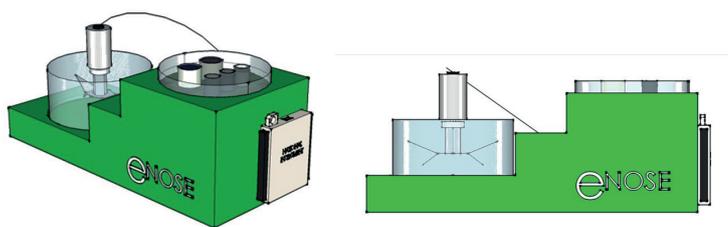
ADVANTAGES

- Easy to operate
- Faster to capture signal
- Lighter weight
- Battery-operated devices
- User friendly device

INDUSTRY OVERVIEW

Prospect Industry: Agricultural /Pharmaceutical /Herb Manufacturer Company

The Phyto-Herbal Electric Nose assists researchers to identify the plant species without referring to the botanists and forest rangers. It is applicable to small and big scale industries, farmers, herb exporters and government agencies such as FAMA, Jabatan Pertanian, FELDA and RISDA. It may introduce recommendations as a trainer tool to new botanists and forest rangers for learning and training process before they expert in that field. According to a new market research report the total digital scent technology market was valued at \$156 million in 2014 and is expected to reach \$691 Million by 2020, at a CAGR of 30.4% between 2015 and 2020. Currently, local major competing players are Majlis Pembangunan Herba Negara (MPHN) whereas global competitors are China and India. Locally, this product is expected to be marketable to farmers of small scale industries such as herb manufacturer companies, government agencies and herbs export-import industries. In the global market, potential sales would be towards countries with high herbal trading including China, India, Europe and the Middle East. The product can be distributed via several marketing channel such as direct distribution as well as through appointed marketing agents.



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