Ecofriends!

أصدقاء بيئة!

Khaled Moustafa*

*Editor of Arabic Science Archive - ArabiXiv

Email: khaled.moustafa@arabixiv.org

Environmental pollution is a serious problem worldwide. It reduces the quality of life in many regions in the world where some cities are suffocated by severe pollution rates with micro- and macro-organic and inorganic wastes, such as gas, metal, glass, cigarette and plastic wastes.

Plastic wastes and cigarettes butts are among the most littered items on the earth, scattered almost everywhere in streets, roadsides, transport stations, cafés, beaches, riversides, parks, etc. Municipalities spend millions of dollars annually on cleaning-up these wastes.

Furthermore, cigarette butts leach toxic chemicals-- such as leads and arsenic-- into the environment, increasing toxicity and harms to local organisms ¹. Plastic wastes on the other hand do not biodegrade easily; hence they must be sorted and recycled permanently. Waste sorting, however, is a costly process that involves important human and financial burdens. To reduce these, I suggest using sniffer dogs as "ecofriends" to collect such wastes and save some of the human and material resources allocated on collecting and separating them at an early stage.

With millions of olfactory receptors in their noses, dogs are one of the most efficient living beings to scent smells and to detect target objects. When they are trained to, canines can track toxic substances, land mines, drugs, disappeared persons, buried nutrients such as truffles, and even to detect some types of cancers ^{2, 3} and to guide blind people.

With such sniff abilities, I think that dogs can be trained to pick up plastics and cigarette butts to improve the efforts of wastes collecting and sorting at an early phase of waste management services. This is feasible because cigarette butts and plastics wastes often have specific odors that dogs can scent and, hence, gather plastic-odorant objects. Easy to train and to put in action, pooches can make a significant contribution to the management of cigarette and plastic wastes, reducing the overall costs of keeping public infrastructures as clean and unpolluted as possible.

References

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