Evaluation of Using Sniffing Dogs to Detect Red Palm Weevil Presence

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The objective is to assess the efficacy of using trained dogs as a method for the detection of Rhynchophorus ferrugineus (Olivier). This insect, native of Asia, is a parasite of palm trees that devour their inside. In Spain, it is causing a lot of damage, because it is destroying a lot of different ecosystems and it even has led some types of palm trees to be in danger of extinction. It is planned to prepare a fully operational detector dog in a time lapse of twelve months, which implies the creation of a terrarium to preserve and reproduce these insects, the monitoring of a training process, giving an unique answer to not solved problems in international researches (“ABSORB&DETECTDOG”), based on an invent that absorbs the air of the top of the tree and makes it descend to make possible red palm weevil detection in higher palms) and cooperate in the lowering of its expansion by a business proposal based on the effectiveness of the research. In this research, it has been proved the dogs’ effectiveness, reaching results up to ninety per cent using a “point by point” method that consists, at first, in aligning opaque boxes with a hole and to hide the odor in one of them. When the dog finds the place where the odor is located, it is awarded with a ball. Then, boxes are replaced by pieces of palm that leads training with palm and weevil odors and makes possible to obtain excellent results in palms’ detection. KEY WORDS: dogs, detection, Rhynchophorus ferrugineus, terrarium, expansion, effectiveness

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