



Microbial survey in Naklua Sinthao, Kalasin Province

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Abstract

In Kalasin Province There is a lot of agricultural land. There are some areas where plants can be grown. Some areas cannot grow crops. and plants that produce low yields Therefore, soil properties (EC and pH values) were surveyed in the area of Kalasin Province. The results from the inspection found that when measuring the EC (dS/m) and pH values of saline soil in the Ban Ton area, Lup Subdistrict, Mueang Kalasin District, Kalasin Province, it was found that the soil surface area had a salinity (EC) of 5.98 dS/. m has a pH value of 4.00, at a depth of 10 cm has a salinity value (EC) of 6.96 dS/m, has a pH value of 5.00, at a depth of 15 cm has a salinity value (EC) of 7.74 dS/m, has a pH value of 5.25, found microorganisms in 3 types of fungi. Results of measurement of EC (dS/m) and pH values of saline soil in the Ban Phon Sim area, Hua Na Kham Subdistrict, Yang Talat District, Kalasin Province. It was found that the soil surface area had a salinity (EC) of 6.03 dS. /m has a pH value of 4.25, at a depth of 10 cm has a salinity value (EC) of 8.81 dS/m, has a pH value of 4.50, at a depth of 15 cm has a salinity value (EC) of 8.99 dS/m, has a pH value of 6.00 and when Microorganisms were examined and separated and found to be Gram-positive bacteria. Gram-negative bacteria and 1 type of fungus, respectively.

Introduction



experimental results

Table 1: Microorganism survey in the soil of Ban tohn, Tambon Lhub, Mueang Kalsin, Kalasin Province.

จุดที่	ค่า EC (dS/m)	ค่า pH	ลักษณะของจุลินทรีย์
1.บริเวณผิวดินความลึกที่ 5 cm	5.98	4.00	
2.บริเวณความลึกที่ 10 cm	6.96	5.00	
3.บริเวณความลึกที่ 15 cm	7.74	5.25	

Table 2: Microorganism survey in the soil of Ban Phonsim, Tambon Huanakham, Amphoe Yang Talat, Kalasin Province.

จุดที่	ค่า EC (dS/m)	ค่า pH	ลักษณะของจุลินทรีย์
1.บริเวณผิวดินความลึกที่ 5 cm	6.03	4.25	
2.บริเวณความลึกที่ 10 cm	8.81	4.50	
3.บริเวณความลึกที่ 15 cm	8.99	6.00	

Expected benefits

Know the types of microorganisms that live in the saline soil area of Ban Phon Sim, Hua Na Kham Subdistrict, Yang Talat District, Kalasin Province. and around Ban Ton, Lub Subdistrict, Mueang District, Kalasin Province

objective

To survey microorganisms in the saline soil area of Ban Phon Sim, Hua Na Kham Subdistrict, Yang Talat District, Kalasin Province.

Experimental method

Dilute microorganisms With 2 levels of dilution, 100 times and 1000 times, by experimenting in a sterile cabinet using alcohol to wash your hands before experimenting. Use a micropipette to measure the amount of distilled water mixed with the soil sample by shaking the water and soil together in a plastic microcentrifuge tube. Then dissolve the soil and place it in another plastic microcentrifuge tube that must be diluted 100 times and 1,000 times. Then use a micropipette to measure the amount of germs in the tube that is diluted 1,000 times and put it in. in the dish because of the bacteria to see how many types of bacteria there are .



Microbial staining process



Discussion of experimental results

From the survey and measurement of the EC and pH of each area, there are the following values. In the area, the soil surface level, the depth of 5 cm, the depth is EC 5.98 dS / m, the pH 4.00, the underground level, the depth at 10 cm, the value of the EC 6.96 dS / m, the pH 5.00 and the underground level, the depth at 15 cm, the EC 7.74 dS / m, the pH 5.25, the pH in the area, the soil level at the depth of 5 cm, the EC 6.03 dS / m, the pH 4.25, the underground depth at 10 cm, the EC 8.81 dS / m, the pH 4.50 and the underground level, the depth at 15 cm, the EC 8.99 dS / m, the pH 6.00

