2019

Study The Effect of Silver Nitrate on Process of Clouds Seeding and Soil Fertility

The researcher:

Dareen Majed Alotaibi

The superintendent:

Dr. Futon alsayeg

Doctor algae applied and fragmentation

Secondary Gifted School

Introduction :

Chemical compounds enrich our life in many ways such as cleaners, sanitizers and medicines. Studying their effects on our life and environment worth trying and among these chemicals is Silver Nitrate. Silver nitrate is a chemical compound which has been used heavily in recent year. My experiment focus is limited to study the underlying substance effects on soil.

The problem:

Scattering clouds chronically using silver nitrate compound.

The goal:

To learn about the negative and positive effect of the underlying substance on soil.

Research Methodology:

experimental research

modification

silver nitrates effects on soil：

soil is the expermintal object

research question:

What are the main effects on soil derived

from silver nitrates ?

The mine important:

Silver nitrates help to stabilize soil components

Research vocabulary:

Silver nitrate

Becket

PH

Soil sample

FOREST SUPPLIEVS,INC

Samples:

Samples were collected from schoolyard.

Hypothesis:

Silver nitrate would help fertilizing the soil to rebuild the soil component and make it less polluted to farming purposes.

The research steps :

1. Communicate with the Dr. Altayash

2. Determine the issue

3. Select the samples from schoolyard, and use special measurements method .

- Ph measurement
- Carbon measurement
- Temperature measurement

ADDING THE NITRATES TO THE SAMPLE :

1.Follow the scientific research steps

2.Observing and writing the data while doing the experiment

3.Write the results

Experiment tools:

SUNFLOWER LEAVE

VINEGAR

WATER SPRAY

FOREST SUPPLIEVS,INC

TWO BUCKETS

TWO GLOVES

SILVER NITRATE

TWO BOTTLES OF DISTILLED WATER

STEPS:

First: ADDING 25 GRAMS OF SOIL TO EACH BUCKET

1.PH MEASURMENT

2.Pouring 50 grams of water and stirring it up to measure PH USING PH reader

3.Put sunflower leaves inside the bucket and left it for two minutes.

4.I brought the second bucket and sprayed it with water and some vinegar with only one water spray.

5.In schoolyard I measured the soil temperature using forest equip. and it was 25.9 C

After adding silver nitrate

1.Silver nitrate solution dry out the water from the sample soil

2.I mixed distilled water with soil then with silver nitrates and put some sunflower leaves and left for two mins.

3.Added silver nitrate to the soil without water and sprayed the vinegar to measure PH.

4.Once again I added 1 ml. of silver nitrate and 50 ml. of water on the soil and measured the temperature after 10 mins.

Results before and after

Before:

-The leaves turned purple which means strong ph of 11 .

-Moderate carbon ratio and little bubbles

After :

-We noticed an increase in carbon ions and the bubbles which helped to stabilize the soil.

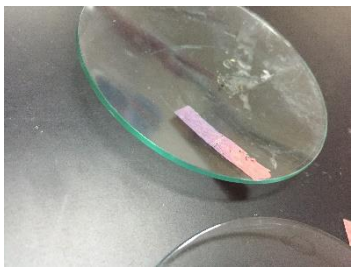
-The soil temp. went up half a degree.

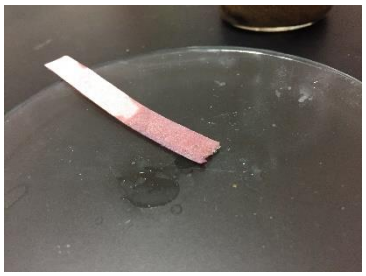
-The effects of silver nitrate were positive by stabilizing the soil components.

-The PH decreased from 11 to 8 after adding the silver nitrate .

Carbon ratio and bubble increased .

PH





Before adding silver nitrate

After adding silver nitrate

Carbon ratio

Before adding silver nitrate

After adding silver nitrate

Temperature

Before adding silver nitrate

After adding silver nitrate

Recommendations

adding silver nitrate solutions to seeds that grow in sandy soil and any plants will increase its fertility rates.

Bibliography:

1. http://www.bytocom.com/vb/168840-post6.html

2.http://www.muslm.org/vb/archive/index.php/t-368872.html

3.The graph of results on soil is obtained the source