

[PP-APR11-035]

## Using Bio-Humus For Greening Technology And Saving Bioresources In Arid Region

Symbat Ydyrys<sup>1</sup>, Alibek Ydyrys<sup>1</sup>, Karlygash Tazhibayeva<sup>2</sup>, Tilek Baidaulet<sup>3</sup>, Symbat Dossymbetova<sup>4</sup>, Lyailya Baktybayeva<sup>1</sup>, Zarina Inelova<sup>1</sup>, Marjan Kulbayeva<sup>1</sup>

<sup>1</sup>Department of Biophysics and biomedicine, Al-Farabi Kazakh National University, Almaty, Kazakhstan

<sup>2</sup>Department of biological sciences, S.Seifullin Kazakh AgroTechnical university, Astana, Kazakhstan

<sup>3</sup>Department of Normal physiology, Asfendiyarov Kazakh National Medical University, Almaty, Kazakhstan

<sup>4</sup>Department of food biotechnology, Almaty Technological University, Almaty, Kazakhstan

Greening the arid zones in Kazakhstan and world, for solving water shortage of agriculture in these areas, we are needed new idea or innovation technology. Because of this, we produced bio-humus combination of desert soils with cleaned and synthesized sheep wool. Sheep wool is considered as useless but rich bio-resources in Kazakhstan. To procedure study, we collected four groups of soils, which used to grow bean sprouts seedling. 1st control group which collected from arid zones, 2nd group black soil, 3rd group bio-humus, 4th group arid soil. The results show that control group growing well in all four weeks. The reason that we watering 3 times more than other group is arid soils vapping the water quickly. Second group grew well in the 1st week but started from 2nd week the plants conditions are becoming medium. Third group' conditions are excellent all weeks, because bio-humus has a feature of saving water for long time. Fourth group plants are dying slowly during four weeks' time, that is because there was lack of water. To use this technology in wild/ field could solve several problems. first, greening arid zones. Second this technology is comply with ecological standards and sources of green energy.

**Keywords:** Bio-humus, Greening technology, Sheep wool, Arid zones, Green energy

### Details

**Status** : Accepted:Poster Presentation

**Presentation Type** : Poster Presentation

**Abstract Category/Topic** : Environmental Biotechnology

**Language** : English

**Saved:** : 25.02.2019 14:24:53

**Submit:** : 25.02.2019 15:03:19

### Confidential to Author and Editor

**Note to Editor** : Dear Sir/Madam,  
Sheep wool is considered as useless but rich bio-resources in Kazakhstan. In our experiment growth conditions of bean sprouts was observed in different soils and different volume of water. In conclusion, third group' conditions are excellent all weeks, because bio-humus has a feature of saving water for long time.  
To use this technology in wild/ field could solve several problems. first, greening arid zones. Second could generate great value for marketing. Third, this technology is comply with ecological standards and sources of green energy.

Because of our study, it is important for saving bioresources in arid region.

**Presenter** : Symbat Ydyrys (ydyrys.alibek@gmail.com)