
KP-MARS-1
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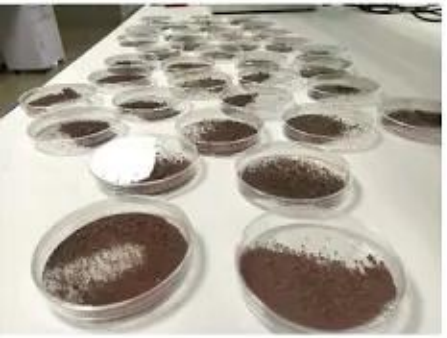


Primovert

1
00:00:05,430 --> 00:00:03,030
hello i'm bhazad from pakistan and my

2
00:00:08,150 --> 00:00:05,440
research at kohat university was focused

3
00:00:10,709 --> 00:00:08,160
on growth and survival of razosphere

4
00:00:12,390 --> 00:00:10,719
soil bacteria in mars oil simulant under

5
00:00:14,870 --> 00:00:12,400
martian conditions

6
00:00:16,950 --> 00:00:14,880
this study has two parts so first we

7
00:00:19,269 --> 00:00:16,960
developed a new mars soil simulant and

8
00:00:21,590 --> 00:00:19,279
we are calling it kp mars one

9
00:00:24,070 --> 00:00:21,600
and the second part deals with the

10
00:00:26,550 --> 00:00:24,080
growth of rhizosphere soil bacteria in

11
00:00:28,710 --> 00:00:26,560
kp mars one soil simulant

12
00:00:30,630 --> 00:00:28,720
this is a radial diagram that shows the

13
00:00:33,270 --> 00:00:30,640

cell count in mars versus earth

14
00:00:36,150 --> 00:00:33,280
conditions with three factors including

15
00:00:38,790 --> 00:00:36,160
temperature uvc radiation and carbon

16
00:00:40,389 --> 00:00:38,800
dioxide conditions of mars

17
00:00:42,549 --> 00:00:40,399
you can see that the most lethal

18
00:00:45,190 --> 00:00:42,559
condition for bacteria on mars is the

19
00:00:46,790 --> 00:00:45,200
uvc radiation and the least lethal

20
00:00:49,510 --> 00:00:46,800
condition is the carbon dioxide

21
00:00:51,270 --> 00:00:49,520
dominancy in martian atmosphere

22
00:00:53,990 --> 00:00:51,280
we conclude that razosphere soil

23
00:00:55,830 --> 00:00:54,000
bacteria might adopt to martian

24
00:00:57,430 --> 00:00:55,840
conditions and might be able to grow

25
00:00:58,869 --> 00:00:57,440
after adaptation

26
00:01:00,389 --> 00:00:58,879
these are some moments during my

27
00:01:02,470 --> 00:01:00,399
research in the lab