
BUT LIFE AROUND A COOL
RED STAR COULD LOOK VERY
DIFFERENT FROM LIFE ON EARTH

1
00:00:00,000 --> 00:00:01,000
[music]

2
00:00:01,010 --> 00:00:04,220
The search for life just leaped forward with a new discovery

3
00:00:04,230 --> 00:00:09,210
Seven Earth-sized planets around the star Trappist-1

4
00:00:09,220 --> 00:00:14,200
Only forty light-years away in the constellation Aquarius.

5
00:00:14,210 --> 00:00:22,090
Could these planets have water
or life?

6
00:00:22,100 --> 00:00:26,010
We don’t know yet.

7
00:00:26,020 --> 00:00:33,110
Here’s what we know:

8
00:00:33,120 --> 00:00:38,100
The seven planets closely orbit a dim red star.

9
00:00:38,110 --> 00:00:43,090
Which is one of the smallest and coolest M dwarfs known.

10
00:00:43,100 --> 00:00:48,080
Scientists debate if M dwarfs are good places to look for life.

11
00:00:48,090 --> 00:00:55,190
But life around a cool red star could look very different from life on Earth.

12
00:00:55,200 --> 00:01:00,180
On a Trappist-1 planet the sun never rises or sets.

13

00:01:00,190 --> 00:01:05,170
Half of the planet is day and half is always night.

14
00:01:05,180 --> 00:01:12,160
A year lasts 1 to 20 days.

15
00:01:12,170 --> 00:01:14,190
The sun would loom up to six times larger in the sky

16
00:01:14,200 --> 00:01:21,020
And daylight would be red-orange.

17
00:01:21,030 --> 00:01:27,120
If planets grew there, they might look red or black.