JOURNAL OF APPLIED PHARMACEUTICAL SCIENCE
Available online at: https://japsonline.com

Evaluation of bioactivities of the bacterial strain *Bacillus velezensis* B26

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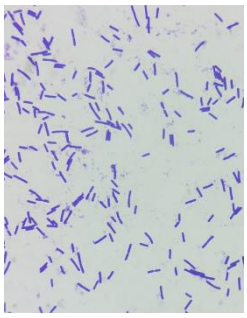
Doi: http://doi.org/10.7324/JAPS.2025.200474

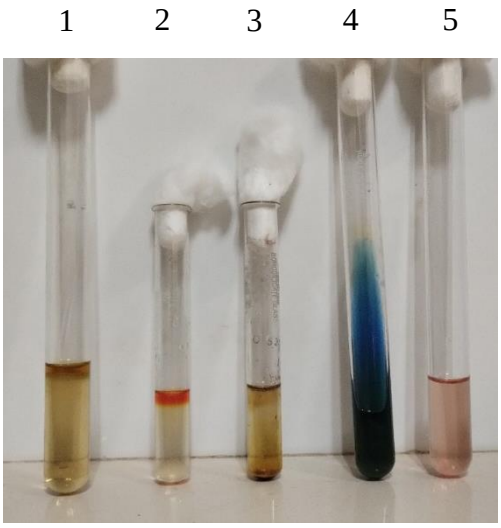
SUPPLEMENTARY MATERIAL

Supplementary Fig. S1.



Gram positive *Bacillus velezensis* B26. A thin smear was prepared using the Gram stain protocol. Gram positive violet rods under oil immersion magnification in the microscope.

Supplementary Fig. S2.



Biochemical tests of *Bacillus velezensis* B26. The bacterial cells were inoculated: 1-SIM medium, 2, 3-MR-VP medium, 3-Simmon's citrate agar slant and 4-Urea broth base with urea. Freshly grown *Bacillus velezensis* B26 were inoculated into their respective medium. Following the prescribed incubation periods, we assessed various biochemical parameters. In the SIM medium (1), indole production was tested by adding few drops of Kovac's reagent. In one of the MR-VP broths (2), few drops of methyl red was added, while in the other MR-VP broths (3), we added Barrit's reagent A and B. Results indicated the absence of indole and H2S production in the SIM medium. Methyl red test was positive, whereas the Voges Proskauer test was negative. The Simmon's citrate medium turned blue, indicating citrate utilization and the urease test was negative.

Supplementary Table. S1. The list of biochemical results obtained for *Bacillus velezensis* B26. A positive result is indicated by the symbol "+" and a negative result is indicated by "- ".

SL. No.	Test	Result
1.	Indole production / H2S production	-/-
2.	Methyl red	+
3.	Vogues proeskeaur	-
4.	Citrate utilization	+
6.	Urea hydrolysis	-
7.	Gelatin Hydrolysis	+
8.	Starch Hydrolysis	+
9	Chondroitinase	+
10	Chitinase	+
11	Glucanase	+

Supplementary Table. S2. Monitored growth of *Bacillus velezensis* B26 is listed below

Time / h	**Optical Density (540 nm)**	O.D. (540nm)
0	0.04	0.04
1	0.07	0.08
2	0.12	0.12
4	0.22	0.23
8	0.64	0.62
12	0.88	0.88
24	1.27	1.29
48	1.46	1.46
60	1.42	1.41

Monitoring the growth of *Bacillus velezensis* B26. Samples from a culture incubated at 37ºC at 150 rpm were taken at regular time intervals of 1, 2, 4, 8, 12, 24, 48 and 60 hours to measure the optical density of the culture at 540 nm.