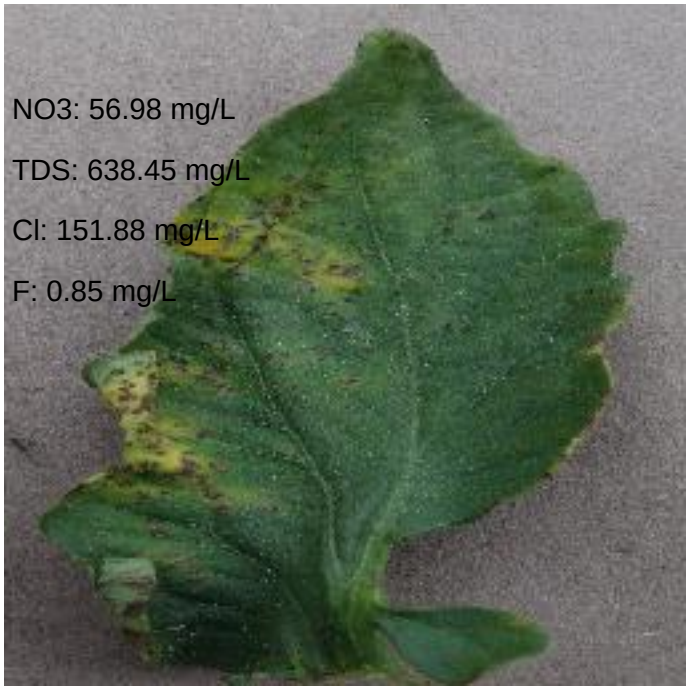
# Plant Health Report

District: VIKARABAD

Disease: Tomato Bacterial spot

Date: 2025-04-21



**Water Quality**

NO3: 56.98 mg/L

TDS: 638.45 mg/L

Cl: 151.88 mg/L

F: 0.85 mg/L

## Diagnosis

The identified disease is **Tomato Bacterial Spot**. It's a common bacterial disease affecting tomatoes and is *not* caused by water quality issues. It's caused by several species of bacteria in the genus *Xanthomonas*. While water *can* spread the bacteria from plant to plant through splashing, the bacteria itself doesn't originate in the water source like nitrate or fluoride contamination.

Here's a breakdown:

* **Cause of Tomato Bacterial Spot:** Bacteria (Xanthomonas spp.)
* **Transmission:** Primarily through splashing water (rain or irrigation) carrying the bacteria from infected plants or plant debris to healthy leaves. Also spread through contaminated seeds, tools, and workers' hands.
* **Water Quality Relevance:** The water quality information provided relates to drinking water standards and human consumption. While high chloride levels might affect plant growth in general over long periods, they don't directly cause bacterial spot. The elevated nitrate could promote lush

growth, potentially making plants more susceptible to diseases in general, but again, it doesn't cause bacterial spot.

* **Best Treatment for Bacterial Spot:**

    * **Prevention is key:** Use certified disease-free seeds and transplants. Rotate crops. Avoid overhead watering (which causes splashing). Sanitize tools and hands.

    * **Copper-based bactericides:** These can help slow the spread but will not cure existing infections. Follow label instructions carefully, and rotate different copper formulations to avoid bacterial resistance.

    * **Remove and destroy infected plants:** This prevents further spread. Do not compost infected plant material.

In summary, while providing water quality information is useful in other contexts, it's a distraction here. The focus should be on managing the bacterial infection directly through preventative measures and appropriate bactericides if necessary.

## Fertilizer Recommendation

Apply a **balanced NPK fertilizer (10-10-10)**. Adjust based on growth stage and soil test results.