



**One Health**  
Student Conference  
USAMV București



# Isolation of antibiotic resistant bacteria from wastewater in the village of tagrambayt, tamanghasset, algeria

Abouamama SIDAOUI <sup>1,\*</sup>, Anis BERTELLA<sup>2</sup>, Amel BENYOUCEF<sup>3</sup>

December 3-6, 2023, București



# Introduction

**Effluents**

homes, industries, hospitals, are a real danger to human, animal, and environmental health. If discharged without prior treatment, or treated at least ineffectively, they contribute to the emergence of antibiotic-resistant bacteria.

**Antibiotic resistant bacteria**

Antibiotic resistance is a global health caused by the misuse and overuse of antibiotics in various sectors. posing challenges in the treatment of bacterial infections.

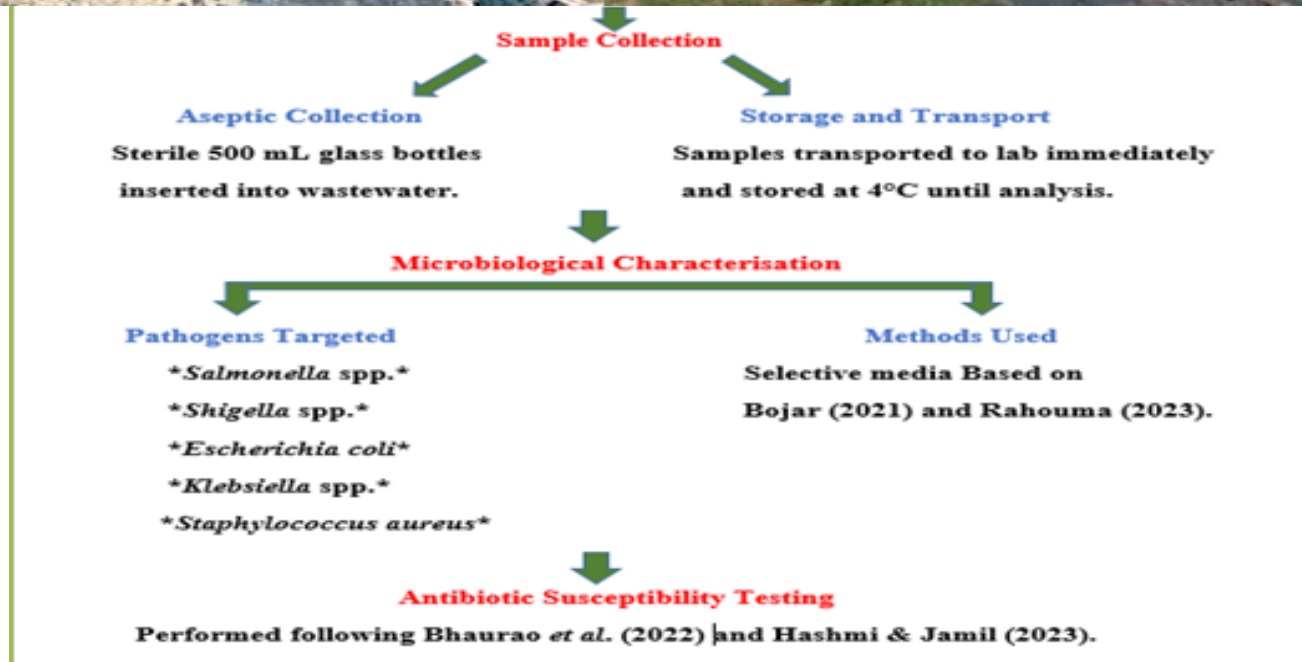


This study aimed to isolate and identify antibiotic-resistant bacteria from liquid effluents from the village of Tagrambayte in the Province of Tamanghasset, Algeria





# Materials and methods





# Results and discussions

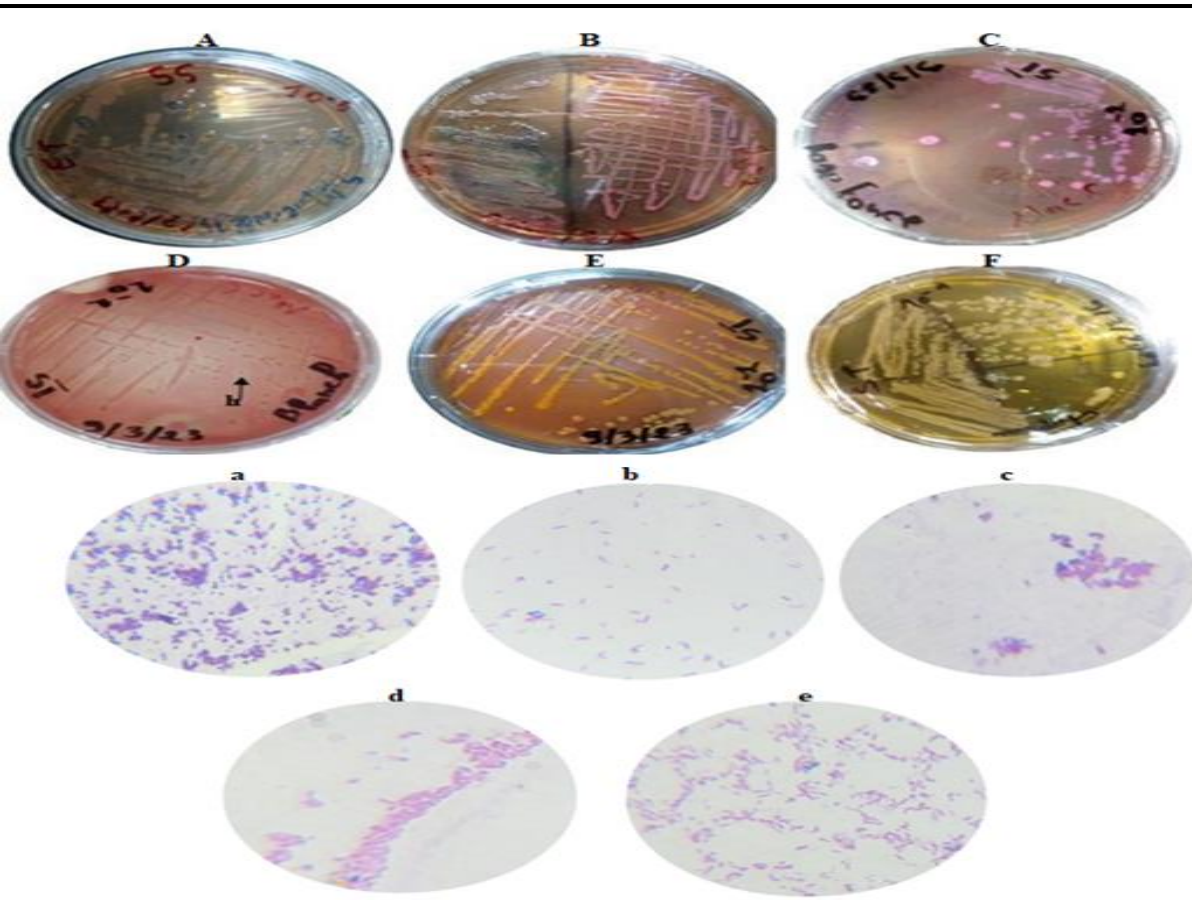


Table 1. Classification of isolated bacteria according to their sensitivities to the tested antibiotics.

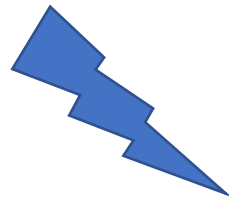
Pathogenic bacteria	Tested antibiotics						
	P	TE	CEP	OFX	FT	TEC	TOB
<i>K. pneumoniae</i>	R	R	R	R	S	R	S
<i>Salmonella sp.</i>	R	R	R	S	S	R	S
<i>Shigella sp.</i>	R	R	R	R	S	R	S
<i>E. coli</i>	R	R	R	R	S	R	R
<i>S. aureus</i>	S	S	R	S	R	S	R

Macroscopic and Gram stain observation of isolated bacteria. *Shigella sp.* (A and b), *Salmonella sp.* on SS Agar in the left (B and e), *Klebsiella pneumoniae* (C and c), *Escherichia coli* (D, E and d), *Staphylococcus aureus* (F and a).



## Conclusions and recommendations

This study revealed that wastewater effluents contain pathogenic bacteria, which poses a real danger to the environment and human health.



It is necessary to improve the monitoring systems of antibiotic use, effluent management and good collaboration between the sectors concerned.

# Thank you for your attention!

**Abouamama SIDAOU**

Mobil: +213655609903

E-mail: [sidaoubouamama@univ-tam.dz](mailto:sidaoubouamama@univ-tam.dz)

Address: Tamanghasset, Algeria



December 3-6, 2023, București



**One Health**  
Student Conference  
USAMV București