

Antibacterial activity and the histopathological study of crude extracts and isolated tecomine from Tecoma stans Bignoniaceae in Iraq

Amad M. Al-Azzawi, Ekbal Al-Khateeb, Kulood Al-Sameraei, Alyaa G. Al-Juboori

Ras Al Khaimah College of Pharmaceutical Sciences, Ras Al Khaimah Medical and Health Sciences University, Ras Al Khaimah, UAE

ABSTRACT

Background Tecoma stans (Bignoniaceae) is a central and south American tree used for the control of diabetes, also known as Yellow Elder, it was collected from the gardens of Al-Jadria in Iraq. **Materials and Methods** One of the main reported alkaloidal constituents, tecomine, was isolated and confirmed by spectral analysis. The bacteriological assay for different plant leaves extracts; aqueous, ethanolic, and isolated tecomine were conducted to evaluate the antibacterial effect against gram-negative and gram-positive bacteria. **Results** Whole alcoholic and aqueous extract exhibited the antibacterial activity and isolated tecomine. Histopathological evaluation was demonstrated on the liver, spleen, and pancreas of the BALB/c mice given the whole alcoholic and aqueous extract that showed no significant changes in the organ texture. **Conclusion** Biochemical analysis of the serum obtained showed decrease in the glucose level in the mice treated with plant extract at the most two higher concentrations used with no change in the cholesterol and triglyceride level.

KEYWORDS

Antibacterial . histopathological . Tecoma stans . tecomine

REFERENCES

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