



Obtención de extractos de plantas endémicas del Estado de Veracruz con efectos medicinales y bactericidas

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Tabla de Contenido

| | | |
|-----|-------------------------------|---|
| 1 | Resumen..... | 3 |
| 1.1 | < Palabras Clave. > | 3 |
| 2 | Abstract..... | 3 |
| 2.1 | < Keywords: (3-5 word)> | 3 |
| 3 | Referencias..... | 3 |

1 Resumen

Diversos estudios han demostrado que *Mangifera Indica* L. presentan un sin número de propiedades farmacológicas. El empleo de extractos de hojas y tallo se ha reportado por poseer efectos antioxidantes, anti-inflamatorios, analgésicos, inmunomoduladores, anti-mutagénicos, hipolipemiantes e hipoglucemiantes. En este trabajo se evaluó la actividad hipolipemiante e hipoglucemiante del extracto etanólico de hoja de *Mangifera indica* L. en un modelo de rata ovariectomizada. Se determinó su actividad antioxidante mediante el método DPPH y se realizaron pruebas bactericidas contra la cepa E.Coli, nuestros resultados demostraron que la depleción estrogénica mediante ovariectomía, incrementa los niveles de glucosa y colesterol total en ratas adultas jóvenes. Así también, se demostró que la administración crónica del extracto *Mangifera Indica* L. vía oral, disminuye significativamente los niveles alterados de glucosa y colesterol en este modelo animal de menopausia inducida. Por otro lado se comprobó que el extracto etanólico posee un efecto antioxidante más potente que el extracto acuoso; se determinó la capacidad para atrapar radicales libres del extracto etanólico de *Mangifera India* L. similar a la de trolox (antioxidante patrón). En cuanto a su efecto bactericida, el extracto demostró que era capaz de originar halos de inhibición bacteriana para la cepa E. coli. Ante la presencia de efectos medicinales, antioxidantes y bactericidas del extracto aquí demostrado, se llevó a cabo la elaboración de jabones y Té que incluían como base dicho extracto.

1.1 < Palabras Clave. >

Hipoglucemiante, hipocolesterolemico, antioxidante, bactericida

2 Abstract

Several studies have shown that *Mangifera Indica* L. present a number of pharmacological properties. The use of extracts of leaves and stems has been reported to have antioxidant, anti-inflammatory, analgesic, immunomodulatory, anti-mutagenic, lipid-lowering and hypoglycaemic effects. In this work, the lipid-lowering and hypoglycaemic activity of the leaf ethanolic extract of *Mangifera indica* L. was evaluated in an ovariectomized rat model. Its antioxidant activity was determined by the DPPH method and bactericidal tests were carried out against the E.Coli strain, our results showed that oestrogenic depletion by ovariectomy increases glucose and total cholesterol levels in young adult rats. Likewise, it was demonstrated that the chronic administration of the extract *Mangifera Indica* L. orally, significantly decreases the altered levels of glucose and cholesterol in this animal model of induced menopause. On the other hand it was proved that the ethanolic extract has a more powerful antioxidant effect than the aqueous extract; the ability to trap free radicals from the ethanolic extract of *Mangifera India* L. was determined similar to that of trolox (standard antioxidant). Regarding its bactericidal effect, the extract showed that it was able to originate halos of bacterial inhibition for the E. coli strain. In the presence of the medicinal, antioxidant and bactericidal effects of the extract shown here, the elaboration of soaps and Tea was carried out, which included as base said extract.

2.1 < Keywords: (3-5 word)>

Hypoglycemic, hypocholesterolemic, antioxidant, bactericidal

3 Referencias

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