TOXICITY PROFILE OF TWO PLANTS USED IN MANAGEMENT OF HYPOGONADISM IN ANIMALS HEALTH

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Introduction

Since time in memorial man has used herbal remedies in animal disease management. This herbal remedies have been claimed to be safe, cheap and readily available to the farmers. Therefore this study was carried out to determine the toxicity profile of *commonly used Citropsis articulata* (Omuboro) and *Mystroxylon aethiopicum* (Esasi) in management of hypogonadism in male albino rats.

Materials and Methods

The research study was carried out in pharmacology and Toxicology research lab (COVAB).

Acute toxicity: Was investigated in 8weeks old mice (18-24g, n=4). Doses we ranging from 7500-22,000mg/kg for both extracts respectively (OECD, 2002).

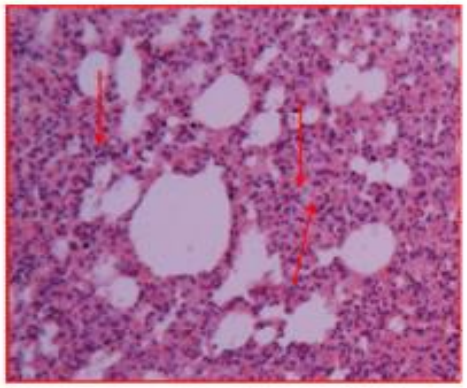
Sub-chronic toxicity: Adult male rats were divided into 7 group (n=6, 150-200 gm). Groups 1-6 receiving (150, 300, 450mg/kg of both extracts) while group 7 (10mg/ml distilled water). Here, organs and body weight, Heamatological, Biochemical and Histopathological parameters were determined.

Discussion and conclusion

This high LD50 values shows that the plant are experimentally safe for use although minor changes were observed in some of toxicity monitoring parameter. This information support their continuous use in animal disease management.

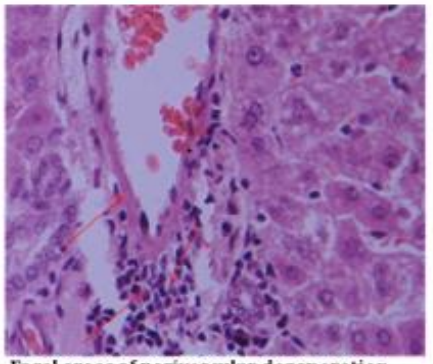
Results: Acute and Sub-chronic toxicity

M. aethiopicum(450mg/kg)I



Pneumonitis and edema was observed: x200, the scale bar is 100um

M. aethiopicum (450mg/kg) C



Focal areas of perivascular degeneration and Lymphocytes infiltration, (x200), the scale bar is 100µm

Effect of extracts on biochemical parameters

Parameters	Controls		*Citropsis articulata*			*Mystroxylon aethiopicum*		
	Negative	Positive	150mg.kg	300mg/kg	450mg/kg	150mg/kg	300mg/kg	450mg/kg
ALT(U/L)	533.2±74.27	440.3±243.6	107.1±3.617*Aa	173.3±48.03*Aa	163.7±16.00*Aa	181.2±17.05*Aa	123.9±12.83*Aa	112.0±13.41*Aa
AST (U/L)	500.8±62.37	580.3±323.8	173.9±11.74	315.4±64.66	199.3±23.11	246.7±39.96	204.0±7.823	159.7±7.11
ALP2S (U/L)	303.0±30.27	355.2±37.12***a	183.7±9.538**Aa	176.0±16.19**Aa	249.2±9.748	275.7±20.72	263.3±18.73	284.5±35.92
BILT2 (umol/l	6.040±0.12	5.67±2.211	2.97±0.96	3.03±0.89	2.02±0.19	1.97±0.23	2.53±0.68	1.32±0.08
CREJ2 (umol/l)	34.50±1.12	33.50±0.99	35.33±2.92	40.00±3.83	33.17±0.60	40.33±1.92	39.33±2.17	45.83±3.72**Aa
UREAL (mmol/l)	6.97±0.13	7.30±0.30	5.28±0.16**Aa	5.48±0.25**Aa	6.18±0.17	7.12±0.11	6.33±0.39	6.32±0.42

Acknowledgement: We are very grateful to RUFORUM for Supporting this research work and Pharmacology Research Lab staff.