

Review of: "Title-Effects of Catha Edulis Forsk on Spatial Cognition and correlation with serum electrolytes in Wild- type Male White Albino Rats"

Workineh Shibeshi Alemayehu

Potential competing interests: The author(s) declared that no potential competing interests exist.

Review comments

General comment:

The authors investigated the Effects of Catha Edulis Forsk on Spatial Cognition and correlation with serum electrolytes in Wild- type Male White Albino Rats. Controversy exists on true effect of khat on learning and memory/cognition. This study generated additional data that may help for generalization of knowledge in the field.

Abstract

- Write the title as 'Abstract'
- In methods: the terms subchronically (kesc) and subacutely (kesa) are vague, write the time in clear language

Introduction

• In-text citations lack uniformity for example, (8 and 9) and (5 & 11).

Materials and methods:

- What was the rationale for authors to use a mixture of diethyl ether and chloroform for extraction of Khat?
- Why Tween 80 was used to prepare khat juice? How this correlate with chewing of khat by people?
- Page 4, last paragraph, first line "The khat juice (khJ) was prepared from 12g/kg body weight (b.w) of fresh leaves" is not clear.
- Page 7, how was cardiac puncture done? were animals anesthetized?

Results

- Table 1: data presentation should be formatted. For example "34.83***±2.46" is not correct. Can be corrected as 34.83±2.46***. This correction should apply also for Tables 2,3,4.
- Table 1: statistical comparisons indicated that treatment doses compared to negative control. What about comparison between doses? Was there any dose-dependent effect?
- What was the role of ascorbic acid indicated in the legends of figures 2, and 4, which is neither described in the methodology? , which is not also found in figures themselves?
- Table 3: Tqt (s) is duplicated

Discussion:



• Why poor correlation was observed between average thigmotaxis and average escape latency? discuss