Screening for Intestinal Antiinflammatory Activity of *Alpinia galanga* (Zingiberaceae)Extract against Acetic acid-induced colitis in mice (*Mus musculus*)

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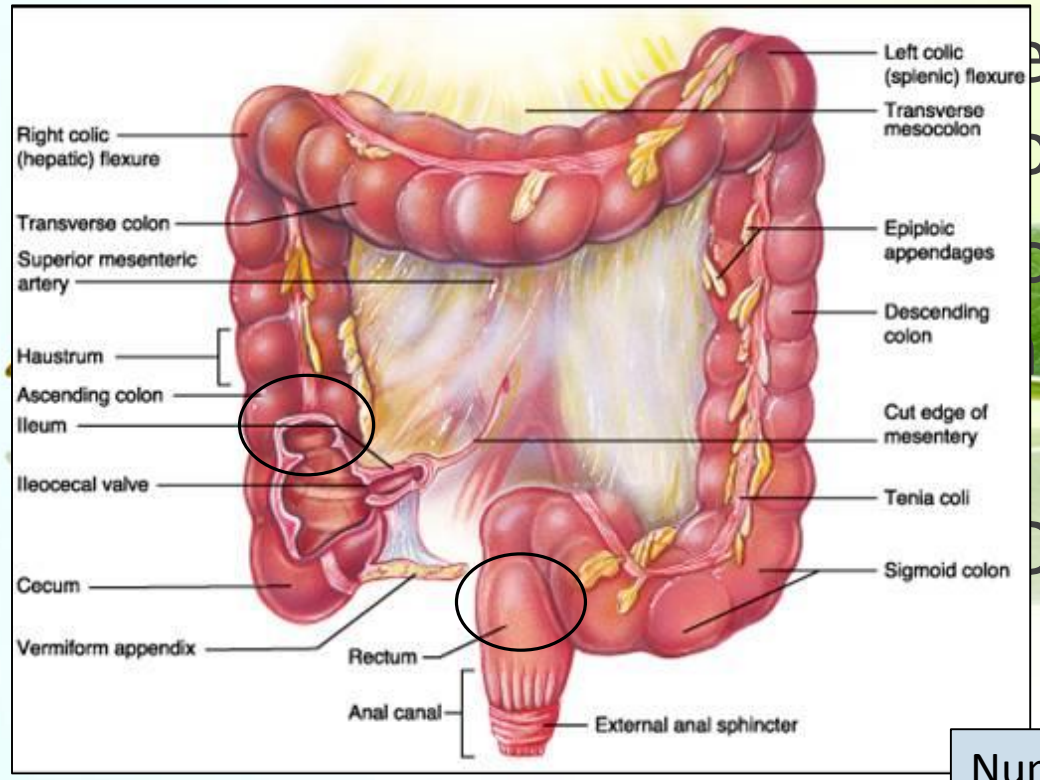
Introduction



http://www.apsubiology.org/anatomy/2020/2020_Exam_Reviews/Exam_3/CH23_Large_Intestine_Anatomy.htm

eases (IBDs) are chronic

of the gastrointestinal tract.

orrhage,

re

Viott et al., 2013

Numerous layers

SULFASALAZINE

The *Alpinia galanga*

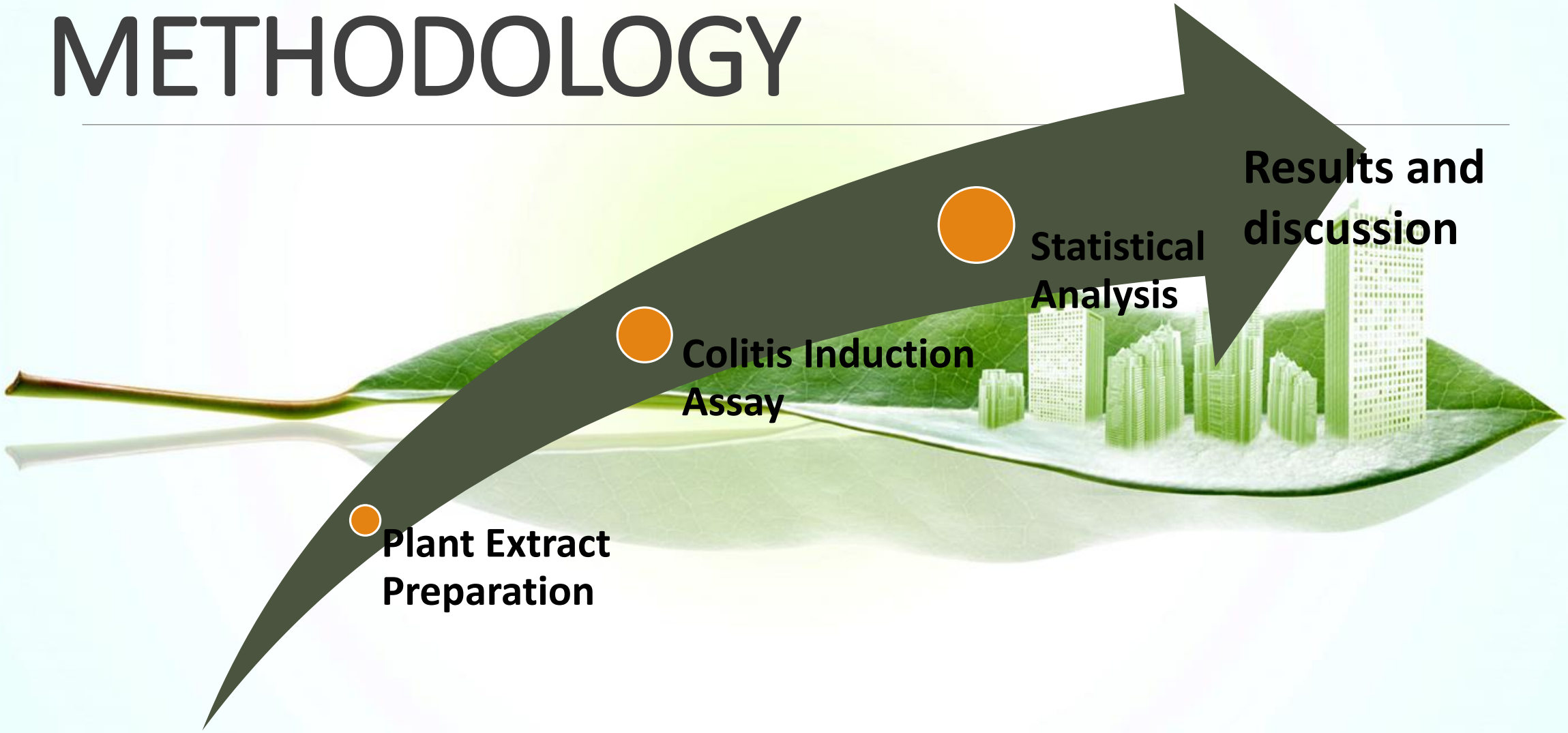
Langkauas is a herbaceous plant with strongly aromatic rhizomes. Stems are 1 to 2 m diameter. It a ls such as b din and

Biological Activites

A. Antimicrobial activity
B. Antiinflammatory
C. Hepatotoxicity
D. Anti-HIV
E. Antidiabetic

http://www.imagejuicy.com/images/plants/a/alpinia/6/

METHODOLOGY



a. Plant extract preparation

b. Colitis induction

Open drop method

trendelburg

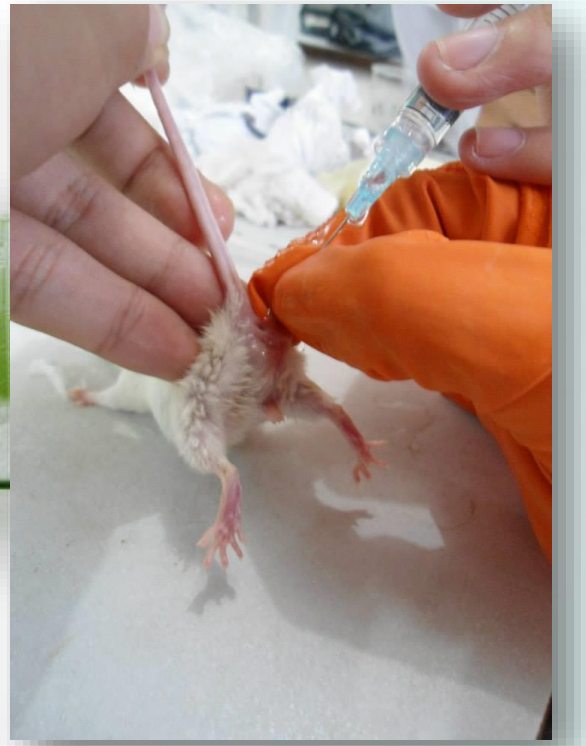
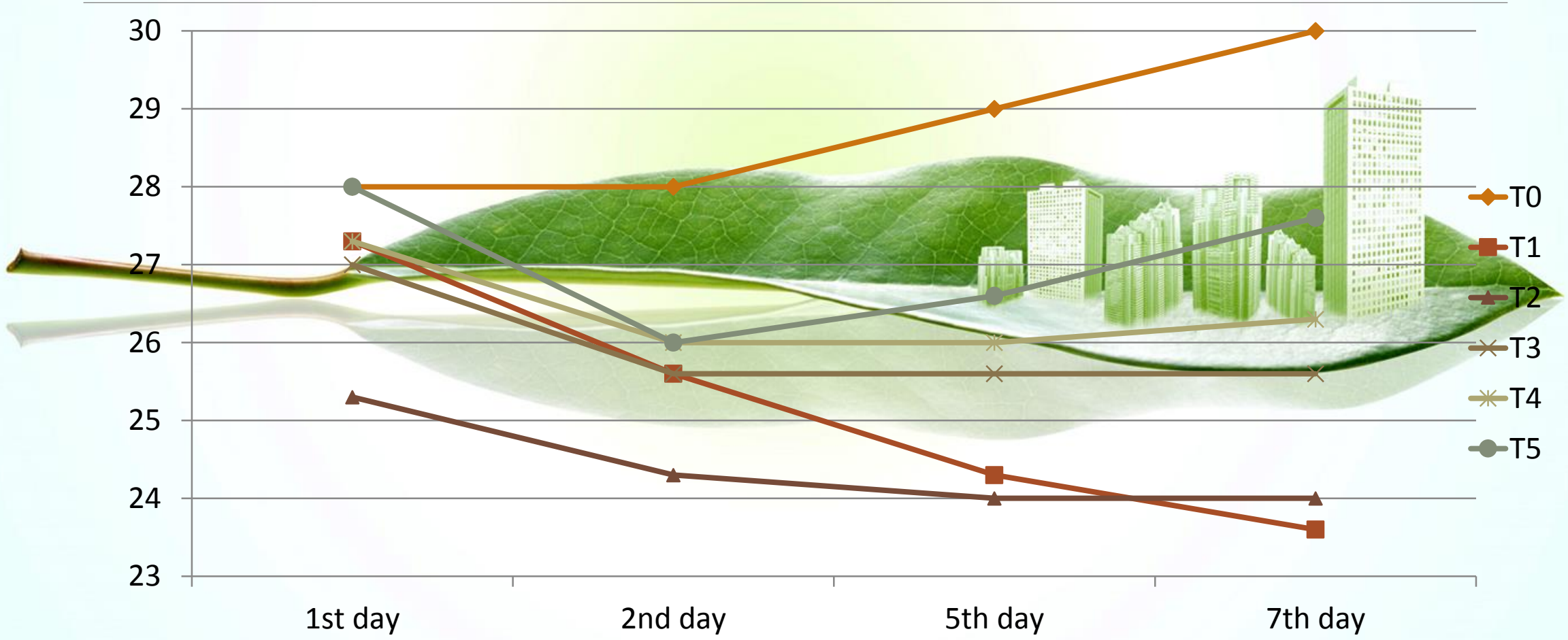


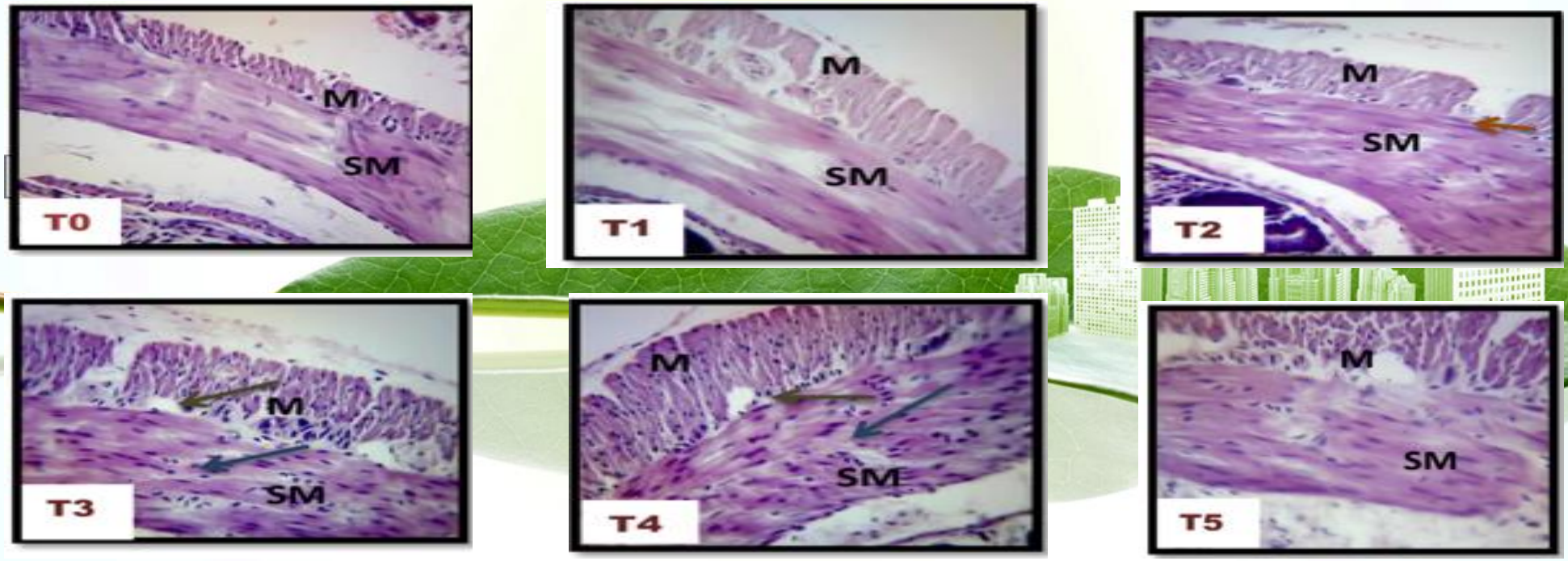
Table no. 2. Criteria for Microscopic Scoring of Colon

SCORE	DEPTH OF NECROSIS	EXTENT OF NECROSIS	EXTENT OF INFLAMMATION	FIBROSIS
0	None	None	none	None
1	mucosal	small area	mucosal	Mucosal
2	mucosal and submucosal	moderate area	mucosal and submucosal	mucosal and submucosal
3	mucosal, submucosal, and muscularis propria	large area	mucosal, submucosal, and muscularis propria	mucosal, submucosal, and muscularis propria
4	full thickness	extensive	full thickness	full thickness

Mean body Weights of Albino Mice at Varying Experimental Treatments



Histoarchitecture of mice colon at different treatments



Stained with H&E. (400x). T0, (control group), T1 (Distilled Water), T2 (25% *A. galanga* extract), T3 (50% *A. galanga* extract), T4 (75% *A. galanga* extract), T5 (Apple pectin). Blue arrows: fibrotic cells; Brown arrows: damage in basal crypt; Orange arrow; Crypt destruction. Mucosa (M); Submucosa (SM).

Microscopic Histoarchitecture of the Normal and the Pathologic Colon of Mice at Varying Concentrations of Galanga Extract

Table 2: Microscopic Histoarchitecture of the Normal and the Pathologic Colon of Mice at Varying Concentrations of Galanga Extract (Mean±SEM)

Treatments	Depth of Necrosis	Extent of Necrosis	Extent of Inflammation	Fibrosis
To (Untreated)	0.00±0.00	0.00±0.00	0.00±0.00	0.00±0.00
T1 (Distilled water)	1.67±0.88	1.33±0.67	2.33±0.67	1.00±5.77
T2 (25% *Alpinia galanga* extract)	2.33±0.33	1.00±0.58	1.67±0.88	1.00±5.77
T3 (50% *Alpinia galanga* extract)	0.00±0.00	0.67±0.33	0.33±0.33	0.33±0.33
T4 (75% *Alpinia galanga* extract)	0.00±0.00	0.00±0.00	0.67±0.33	0.33±0.33
T5 (Apple Pectin)	0.00±0.00	0.00±0.00	0.33±0.33	0.33±0.33

ns-not significant at 5% level by DMRT

*means labelled with same letters are significantly different at 5% level by DMRT

Thank you for Listening!