



Copper-modified palygorskite is effective in preventing and treating diarrhea caused by *Salmonella typhimurium*

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Introduction



Palygorskite

afatoxin adsorbent

tannin adsorbent

excipient

gastrointestinal protector



Introduction



Cu^{2+}

antibacterial properties

growth promotion

enhance immunity

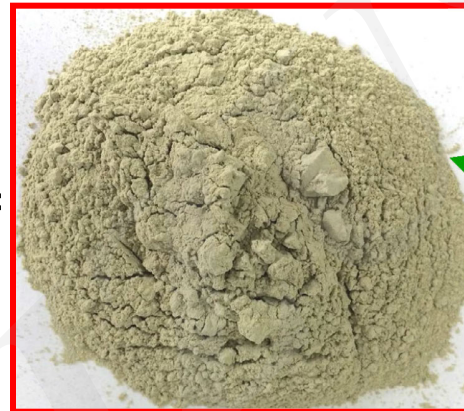


Materials and methods



+

=



antibacterial
properties

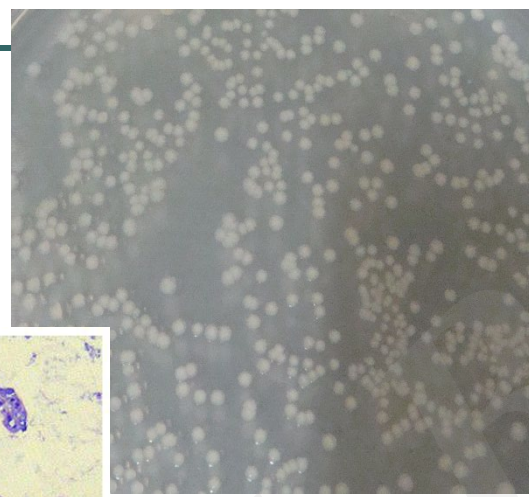
adsorbent

gastrointestinal
protector

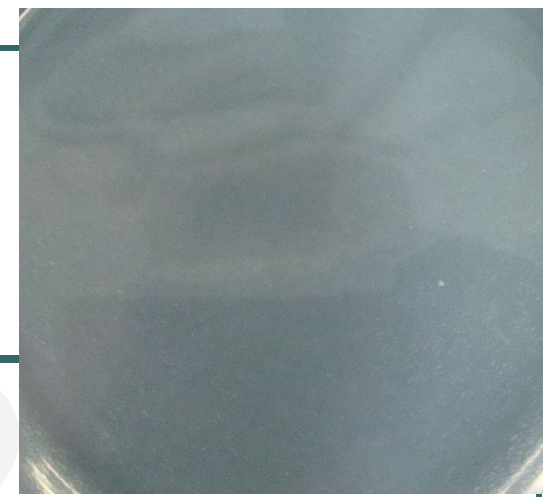
**anti-diarrheic
activity**



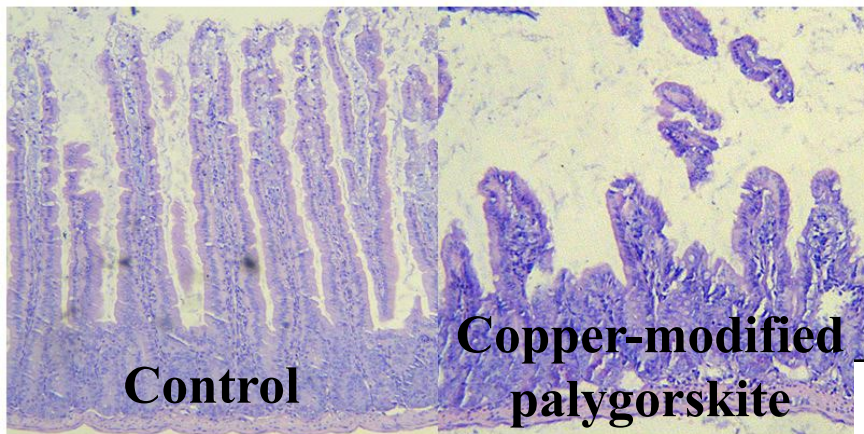
Results



Control



Copper-modified palygorskite



Control

Copper-modified palygorskite

antibacterial properties in vitro

Incidence of diarrhea %

Group	Incidence of diarrhea %			
	12 h	24 h	48 h	96 h
CM-Pal prevention	80	0	0	0
uninfected	N	0	0	0
Pal	90	30	10	0
montmorillonite	80	30	10	0
CM-Pal treatment	50	0	0	0
gentamicin	100	90	20	10
no treatment	100	60	50	50

gastrointestinal protector

anti-diarrheic activity