

Table 4 Screening of selected sponges for chemical constituents

Sample no.	Test	Reaction	Present(+)/absent (-)
1	Test for Steroids: Cold extract + minimum amount of $\text{CHCl}_3$ + 3 drops of acetic anhydride + 2 drops of Conc. sulphuric acid	Purple colour solution changing to blue or green	+
2	Test for Triterpenoids: Cold extract + piece of tin + 3 Drops of thionyl chloride	Violet or purple colour solution	+
3	Test for Reducing sugar:		
a	Cold extract + equal volume of Fehling A&B + heated over water bath	Red precipitate	
b	Cold extract + Tollens reagent and heated over bath	Silver mirror purple colour	+
c	Cold extract + Molish reagent	Purple colour	
4	Test for Aalkaloids:		
a.	Cold extract + 2N HCl (aqueous layer decanted) + 2 drops of Mayers reagent (KI + HgCl)	Pale yellow or white precipitate	+
b.	Cold extract + acetic acid (aqueous layer decanted) + few drops of Dragendroff's reagent	Orange or red orange precipitate	
5	Test for Phenolic compound: Cold extract + Neutral $\text{FeCl}_3$	An intense blue or violet coloration	+
6	Test for Saponin: Cold extract + water mixture shaken vigorously	Formation of foamy layer	+
7	Test for Xantho proteins: Cold extract + concentrated Nitric acid + excess Ammonia	Red orange precipitate	+
8	Test for Tannins: Cold extract + basic lead acetate	White precipitate	+
9	Test for Flavanoids: Cold extract + bit of $\text{Mg}^{2+}$ drops of Con. HCl Heated and then cool	Red or orange red color	+
10	Test for Aromatic acids: Cold extract + Saturated Sodium bicarbonate	Brisk effervescence	+