Supplementary Material

Annexure 1: Observation Tables

Table 2. The recorded weight of different gallstone samples at different time

Extract or Solvent	Record wt. for CCGS (mg)				Recorded wt. for black PGS (mg)			
	Initial	4h	94h	190h	Initial	4h	94h	190h
E1 (*M. uniflorum*)	**14.7**	14.1	10.3	8.6	**21.3**	20.9	18.6	11.6
E2 (*B. asiatica*)	**14.3**	14.0	7.7	3.0	**21.2**	21.0	17.9	15.4
E3 (*B. ciliata*)	**14.5**	14.2	11.6	9.3	**21.4**	20.8	19.4	17.3
E4 (*C. europaea*)	**14.2**	13.8	11.4	6.4	**21.1**	20.5	18.3	12.2
E5 (*T. officinale*)	**14.1**	13.6	12.5	10.6	**21.5**	20.0	15.2	11.5
E6 (*K. pinnata*)	**14.8**	14.6	13.8	12.1	**21.7**	21.3	20.0	19.2
M1 (Cystone®)	**14.5**	14.3	13.6	10.9	**21.8**	21.5	20.1	19.6
M2 (Calcury)	**14.5**	14.1	13.3	10.1	**21.3**	21.0	18.7	16.9
M3 (Gokshuradi)	**14.4**	14.2	9.5	8.1	**21.6**	20.6	19.2	17.7
EDTA (+ve control)	**14.7**	13.8	10.7	9.1	**21.7**	18.5	12.3	9.8
EtOH (+ve control)	**14.6**	11.8	0.0	0.0	**21.5**	18.5	13.8	12.5
W1 (–ve control)	**14.4**	14.3	14.1	13.9	**21.4**	21.3	21.1	21.0

Note: Codes E1 to E5 was given for plant extracts, M1 to M3 for ayurvedic medicine extracts, 2% EDTA and 95% EtOH were used as positive control whereas distilled water (code W1) was used as negative control. GSA= Gallstone sample A, GSB = Gallstone sample B. Different samples of GSA and GSB were coded for GSA1 to GSA12 or GSB1 to GSB12 respectively.

Table 3. Dissolution and cumulative dissolution of CCGS in different extract and solvent preparations

Sample	Dissolution (mg)			Cumulative dissolution (mg)		
	4 h	94 h	190 h	4 h	94 h	190 h
GSA1/E1	0.5	3.6	1.5	0.5	4.1	**5.6**
GSA2/E2	0.2	6.1	4.5	0.2	6.3	**10.8**
GSA3/E3	0.2	2.4	2.1	0.2	2.6	**4.7**
GSA4/E4	0.3	2.2	4.8	0.3	2.5	**7.3**
GSA5/E5	0.4	0.9	1.7	0.4	1.3	**3.0**
GSA6/E6	0.1	0.6	1.5	0.1	0.7	**2.2**
GSA8/M1	0.1	0.5	2.5	0.1	0.6	**3.1**
GSA9/M2	0.3	0.6	3.0	0.3	0.9	**3.9**
GSA10/M3	0.1	4.5	1.2	0.1	4.6	**5.8**
GSA11/EDTA	0.8	2.9	1.4	0.8	3.7	**5.1**
GSA12/EtOH	2.7	11.6	–	2.7	14.3	**14.3**

Note: EDTA and EtOH were used as positive controls and distilled water as a negative control. The data for each experiment are expressed after subtracting the data obtained for negative control. GSA= Gallstone sample A, E1= *M. uniflorum*, E2= *B. asiatica*, E3= *B. ciliata*, E4= *C. europaea*, E5= *T. officinale*, E6= *K. pinnata*, M1= Cystone®, M2= Calcury, and M3= Gokshuradi, (–) = Dissolved completely

Annexure 1: continued

Table 4. Dissolution and cumulative dissolution of black PGS in different extract and solvent preparations

Sample	Dissolution (mg)			Cumulative dissolution (mg)		
	4 h	94 h	190 h	4 h	94 h	190 h
GSB1/E1	0.3	2.1	6.9	0.3	2.4	**9.3**
GSB2/E2	0.1	2.9	2.4	0.1	3.0	**5.4**
GSB3/E3	0.5	1.2	2.0	0.5	1.7	**3.7**
GSB4/E4	0.5	2.0	6.0	0.5	2.5	**8.5**
GSB5/E5	1.4	4.6	3.6	1.4	6.0	**9.6**
GSB6/E6	0.3	1.1	0.7	0.3	1.4	**2.1**
GSB8/M1	0.2	1.2	0.4	0.2	1.4	**1.8**
GSB9/M2	0.2	2.1	1.7	0.2	2.3	**4.0**
GSB10/M3	0.9	1.2	1.4	0.9	2.1	**3.5**
GSB11/EDTA	3.1	6.0	2.4	3.1	9.1	**11.5**
GSB12/EtOH	2.9	4.5	1.2	2.9	7.4	**8.6**

Note: EDTA and EtOH are used as positive controls and distilled water as a negative control. The data for each experiment are expressed after subtracting the data obtained for negative control. GSB= Gallstone sample B, E1= *M. uniflorum*, E2= *B. asiatica*, E3= *B. ciliata*, E4= *C. europaea*, E5= *T. officinale*, E6= *K. pinnata*, M1= Cystone®, M2= Calcury, and M3= Gokshuradi

Annexure 2: Photograph of gallstones before and after dissolution

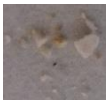
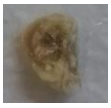
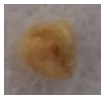
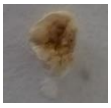
Extract/Solvent	Sample (GSA)	After 4 h	After 94 h	After 190 h
E1 (*M. uniflorum*)				
E2 (*B. asiatica*)				
E3 (*B. ciliata*)				
E4 (*C. europaea*)				
E5 (*T. officinale*)				
E6 (*K. pinnata*)				
M1 (Cystone®)				
M2 (Calaury)				
M3 (Gokshuradi)				
EDTA (+ve control)				
EtOH (+ve control)				
W1 (–ve control)				

Figure 3. Photographs of GSA taken at different time

Annexure 2: Continued

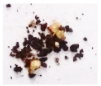
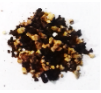
Extract/Solvent	Sample (GSB)	After 4 h	After 94 h	After 190 h
E1 (*M. uniflorum*)				
E2 (*B. asiatica*)				
E3 (*B. ciliata*)				
E4 (*C. europaea*)				
E5 (*T. officinale*)				
E6 (*K. pinnata*)				
M1 (Cystone®)				
M2 (Calaury)				
M3 (Gokshuradi)				
EDTA (+ve control)				
EtOH (+ve control)				
W1 (–ve control)				

Figure 4. Photographs of GSB taken at different time

Annexure 3: Photograph of instruments

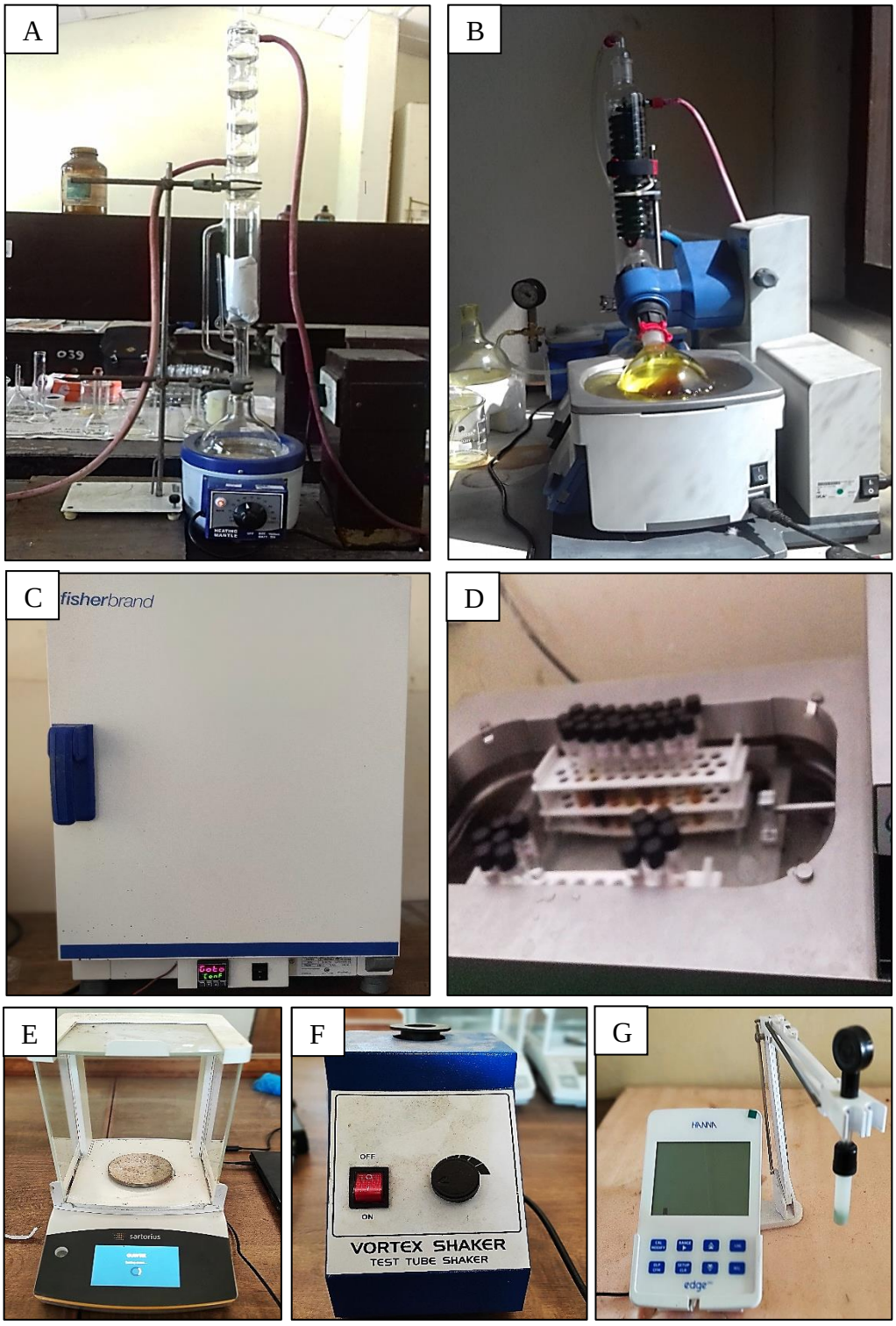


Figure 5. (A) Soxhlet apparatus; (B) Rotavapor; (C) Incubator; (D) Shaking water bath; (E) Analytical balance; (F) Vortex shaker; (G) pH meter

Annexure 4: Photographs of medicines, extracts, and stone dried in crucible

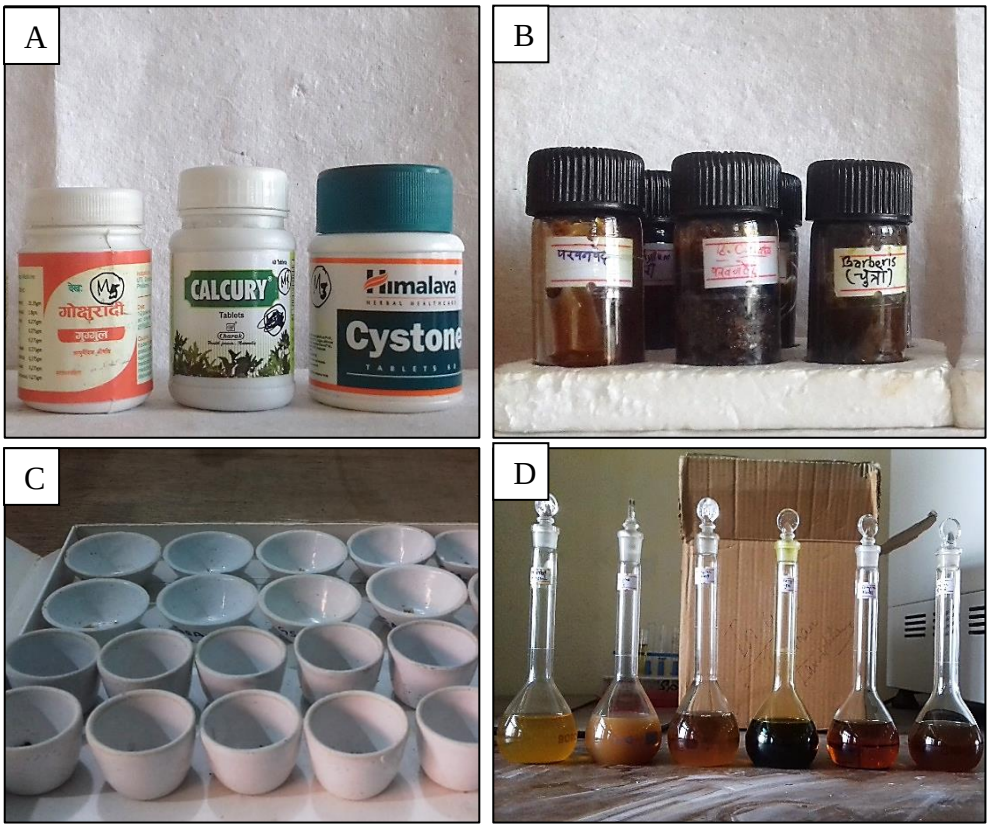


Figure 6. (A) Ayurvedic medicines; (B) Plant extracts; (C) Gallstone samples dried in crucible; (D) 50 mg/mL solution of different plant extracts

Annexure 5: Plant collection

Figure 7. Gahat seeds (*Macrotyloma uniflorum* (Lam.) Verdc.)

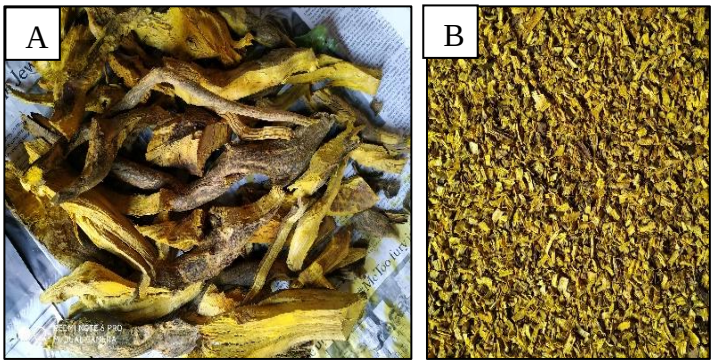


Figure 8. Chutro (*Berberis asiatica* Roxb. ex DC.). (A) Root; (B) Root cut down into small pieces; (C) Root powder

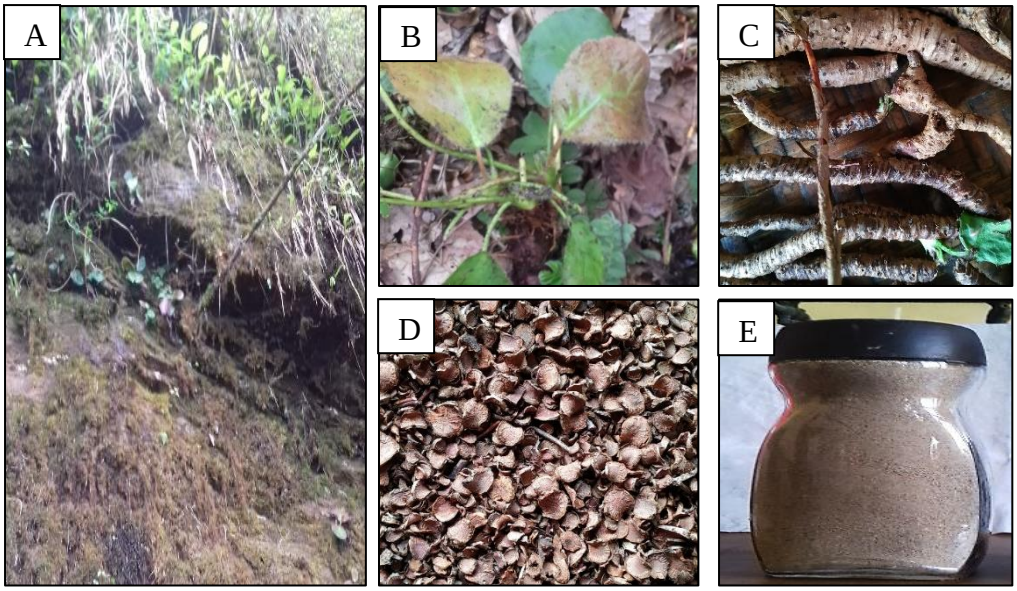


Figure 9. Pakhanbhed (*Bergenia ciliata* (Haw.) Sternb.). (A) Plant location; (B) *B. ciliata* plant; (C) Rhizome; (D) Rhizome shed dried; (E) Rhizome powder

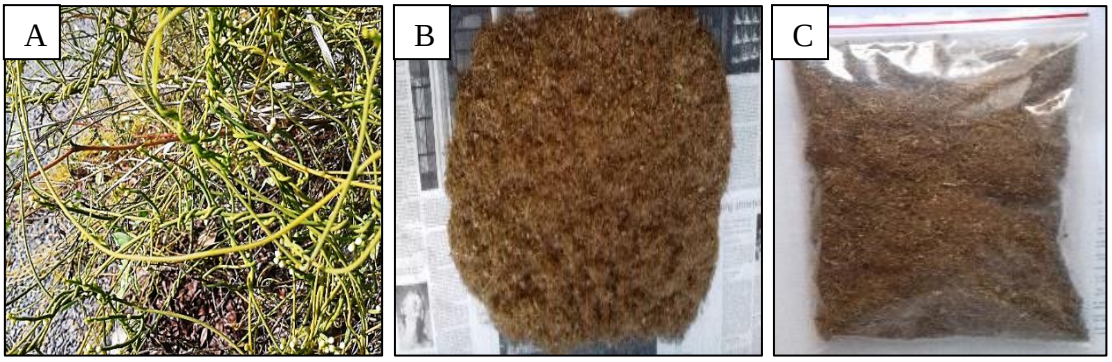


Figure 10. Aakashbeli (*Cuscuta europaea* L.). (A) Plant location; (B) Plant shed dried; (C) Plant powder

Figure 11. Tuki ful (*Taraxacum officinale* Wigg.). (A) *T. officinale* plant; (B) Plant washed with tap water; (C) Plant shed dried; (D) Plant powder

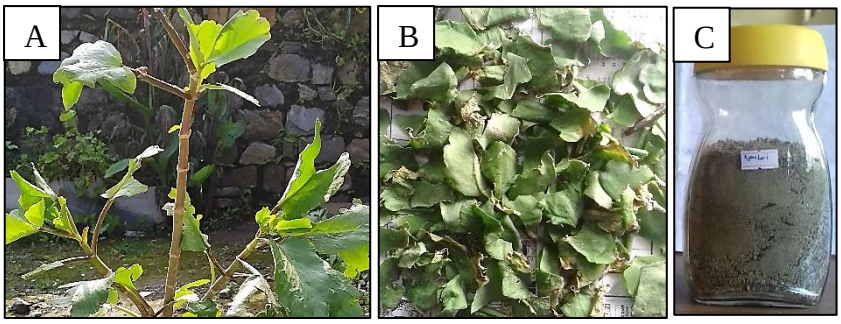


Figure 12. Ajambari (*Kalanchoe pinnata* (L.f.) Pers.). (A) *K. pinnata* plant; (B) Plant leaves shed dried; (C) Leaves powder