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Supplementary Material

Phytochemical and Pharmacological Potential of *Camellia sinensis* L.

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Supplementary Table I. Percentage yield of root, stem, leaf and seed of *C. sinensis L.* with different solvents.

Plant part	Petroleum ether	Acetone	Ethanol	Water
Root	5.0	2.9	1.0	1.0
Stem	10.0	3.0	2.0	2.0
Leaf	6.0	5.3	12.0	1.0
Seed	12.0	10.9	20.0	1.0

Supplementary Table II. Phytochemical analysis of petroleum ether extracts of various parts of *C. sinensis* L.

Phytochemicals	Test reagents	Root	Stem	Leave	Seed
Primary metabolites					
Carbohydrates	Benedict's test	++	+++	++	++
	Molisch's test	++	++	++	++
Proteins	Xanthoproteic test	+	+	+	-
Fats and fixed oils	Stain test	++	-	+	+++
Secondary metabolites					
Alkaloids	Dragendroff's test	+++	+	-	+
Glycosides	Fehling's test	+++	+++	++	++
Saponins	Froth formation test	++	++	-	+++
Tannins	Ferric chloride test	-	++	+++	-
	Gelatin test	++	++	-	+++
Resins	Acetone water test	+++	+++	+++	+++
Flavonoids	Lead acetate test	-	++	+++	+++
Lignin	Saffranine test	-	-	-	-
Tri-terpenoids	Salkowski test	++	+++	+++	-
Steroids	Vanillin-H_2SO_4 test	-	-	-	-

+, Slightly positive; + +, Positive; + + +, Strongly positive; -, Negative

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Supplementary Table III. Phytochemical analysis of acetone extract of various parts of *C. sinensis* L.

Phytochemicals	Test reagents	Root	Stem	Leave	Seed
Primary metabolites					
Carbohydrates	Benedict's test	-	+	-	+++
	Molisch's test	-	+	-	++
Proteins	Xanthoproteic test	-	-	-	-
Fats and fixed oils	Stain test	-	+	+	+++
Secondary metabolites					
Alkaloids	Dragendroff's test	-	++	++	-
Glycosides	Fehling's test	+++	++	+++	-
Saponins	Froth formation test	+	++	+++	+++
Tannins	Ferric chloride test	+	+++	+++	-
	Gelatin test	-	-	++	-
Resins	Acetone water test	+	+	+++	++
Flavonoids	Lead acetate test	-	++	-	+++
Lignin	Saffranine test	++	+++	+++	++
Tri-terpenoids	Salkowski test	-	++	++	+
Steroids	Vanillin-H_2SO_4 test	+	++	++	+

+, Slightly positive; + +, Positive; + + +, Strongly positive; -, Negative

Supplementary Table IV. Phytochemical analysis of ethanolic extracts of various parts of *C. sinensis* L.

Phytochemicals	Test reagents	Root	Stem	Leave	Seed
Primary metabolites					
Carbohydrates	Benedict's test	++	++	+	-
	Molisch's test	+	+	+	+
Proteins	Xanthoproteic test	+	+	+	-
Fats and fixed oils	Stain test	-	-	-	-
Secondary metabolites					
Alkaloids	Dragendroff's test	++	+	-	-
Glycosides	Fehling's test	+++	-	++	-
Saponins	Froth formation test	++	-	++	-
Tannins	Ferric chloride test	+++	++	+	+++
	Gelatin test	++	+++	-	++
Resins	Acetone water test	++	-	++	++
Flavonoids	Lead acetate test	++	++	++	-
Lignin	Saffranine test	-	-	-	-
Tri-terpenoids	Salkowski test	++	-	+	-
Steroids	Vanillin-H_2SO_4 test	-	-	-	-

+, Slightly positive; + +, Positive; + + +, Strongly positive; -, Negative

Supplementary Table V. Phytochemical analysis of water extract of various parts of *C. sinensis* L.

Phytochemicals	Test reagents	Root	Stem	Leave	Seed
Primary metabolites					
Carbohydrates	Benedict's test	-	+	-	-
	Molisch's test	-	-	++	-
Proteins	Xanthoproteic test	++	+	+++	+++
Fats and fixed oils	Stain test	-	-	-	-
Secondary metabolites					
Alkaloids	Dragendroff"s test	-	-	++	-
Glycosides	Fehling's test	++	++	-	+
Saponins	Froth formation test	-	-	+++	-
Tannins	Ferric chloride test	+++	+++	+++	+++
	Gelatin test	-	-	+++	-
Resins	Acetone water test	-	-	-	-
Flavonoids	Lead acetate test	-	-	-	-
Lignin	Saffranine test	-	-	+++	-
Tri-terpenoids	Salkowski test	++	-	+	++
Steroids	Vanillin-H_2SO_4 test	-	-	+++	-

+, Slightly positive; + +, Positive; + + +, Strongly positive; -, Negative