

Atreya Ayurveda Pratisthana®
Spoorthi Ayurveda Medical College and
Dr S.V.Savadi Ayurvedic Medical college Gangavathi
 ISO 9001:2015 Recognized Institution
 (Recognized By Govt. of Karnataka & N.C.I.S.M. New Delhi)
 (Affiliated to Rajiv Gandhi University of Health Sciences, Bangalore)



Date: 29/06/2026

Manthana Central Research Laboratory

Test Requested By: Madhukar

Requested On: 5/05/2026

Test Performed: Specific gravity, pH, Refractive index, Total alcohol content, Viscosity, Quantification of phenols, Antioxidant study of Balarishta by DPPH method

Sample Code : 007

Sample Details: Balarishta

Organoleptic Evaluation

Parameter	Observation
Colour	Dark Brown
Odour	Characteristic Aromatic Alcoholic Odour
Taste	Madhura With Kashaya After Taste
Consistency	More Viscous Than Water

Table.1 Organoleptic Evaluation

Physico-Chemical Parameters

Test	Results
Specific Gravity	1.027 g/ml
pH	2.98
Refractive Index	1.41

Objective: To

Materials:

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Total Alcohol Content	5%
Viscosity	1.2



Table 2: Physico-Chemical Parameters

Test for Phenols

Test	Observation	Inference
Ferric chloride Test Add 2-3 drops ferric chloride solution to the sample	Blue-black colour	+++

+ Mild presence, ++ Moderate presence, +++ Strongly present, - Negative

Table 3: Test of Phenols

Quantification of Total Phenol

Total phenolic content was determined using Folin-ciocalteus method. The phenolic content was calculated from the gallic acid calibration curve and expressed as mg Gallic acid equivalent of sample

Gallic acid	Methanol	FC in μ l	Sodium carbonate in μ l	Absorbance
100	400	150	500	0.6859
150	350	150	500	0.7776
200	300	150	500	0.8177
250	250	150	500	0.9044
300	200	150	500	1.0061
Sample 100	400	150	500	1.8717

Table 3: Quantification of Total Phenol

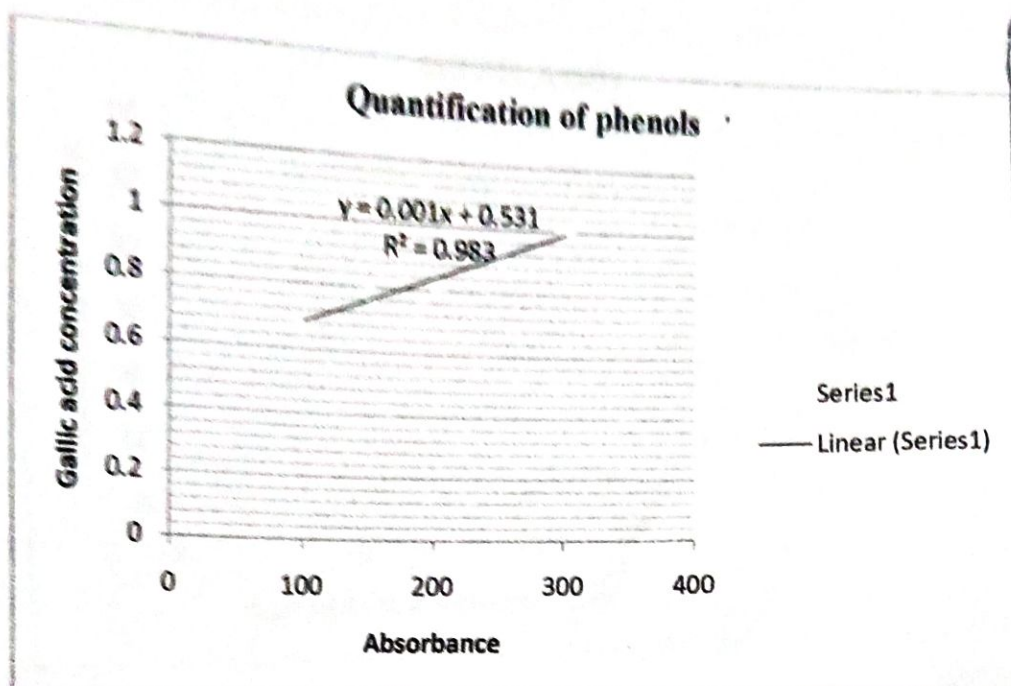


Fig 1: Quantification of phenols

The absorbance was determined using spectrophotometer at $\lambda_{max}=760nm$

$$Y=mx+c$$

$$X=y-c/m$$

$$X=1.8717-1.479/0.008$$

$$X=49.08 \text{ mg/g}$$

Antioxidant study (DPPH Assay)

The antioxidant activity of the test sample as evaluated by the DPPH free radical scavenging assay

Concentration in $\mu\text{g/ml}$	Control absorbance	Sample	%RSA	IC50
20	0.3408	0.2881	15.46	100.88
40	0.3408	0.2698	20.83	
60	0.3408	0.2439	28.43	
80	0.3408	0.2003	41.22	
100	0.3408	0.1674	50.88	

Table 3: DPPH Assay of Balarista

$$\%DPPH \text{ inhibition} = [\text{abs of control} - \text{abs of sample}] / [\text{abs of control}] \times 100$$

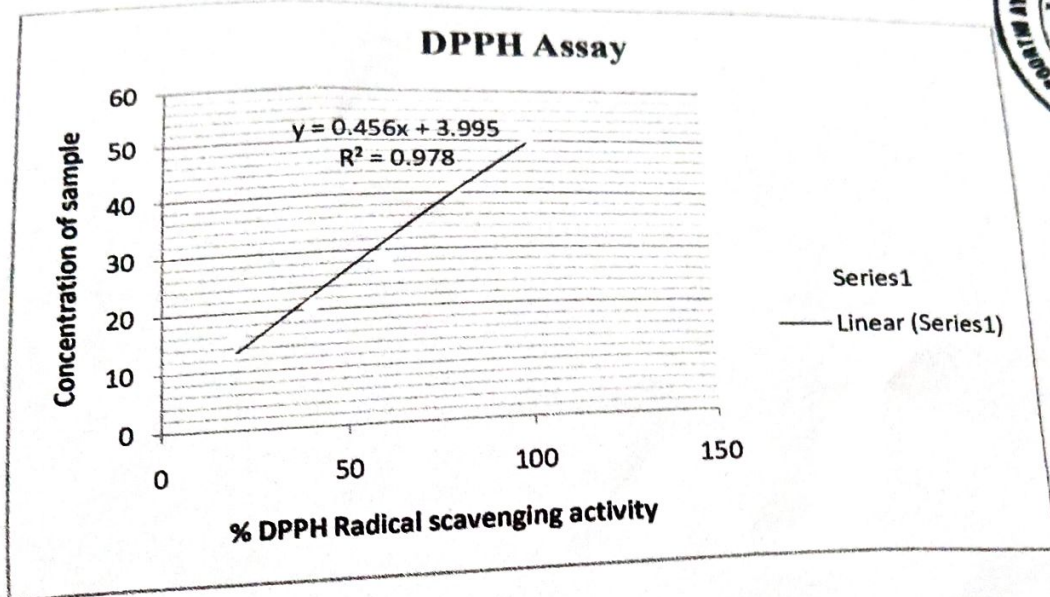


Fig 2 Showing quantification of phenols in balarista

$$Y = mx + c$$

$$X = 50 - 3.995 / 0.456$$

$$X = 100.88 \mu\text{g/ml}$$

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29/6/20

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