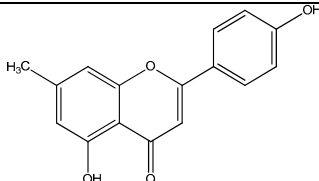
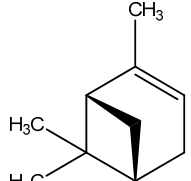
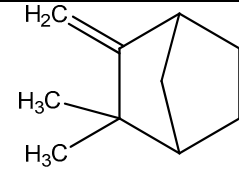
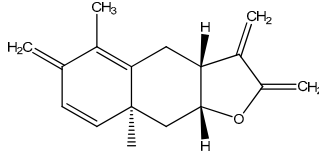
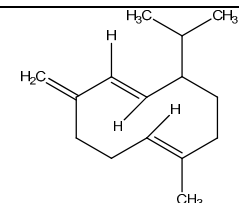
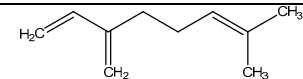
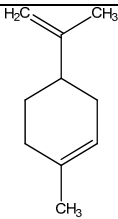
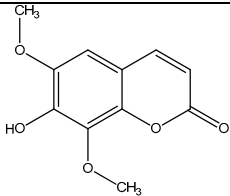
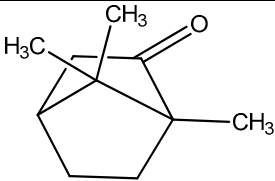
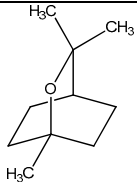
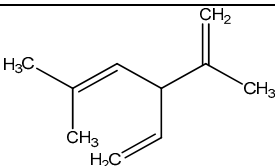
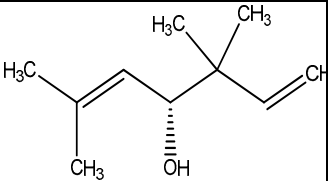
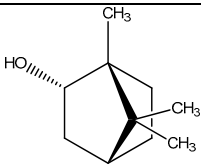
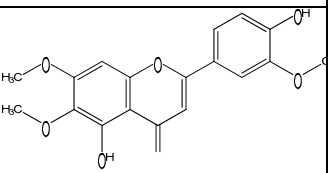
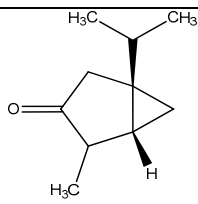
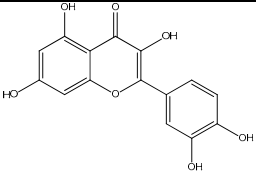
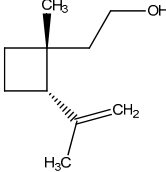
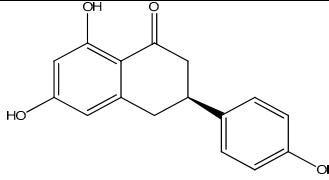
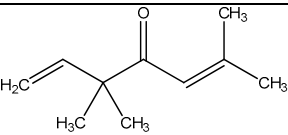
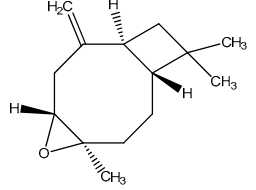


Supplementary material

Table S1. Phytochemical compounds of *Artemisia vestita* leaf extract (ALE) from HP (India) detected by using GC-MS analysis and their biological activity.

S No.	Retention time (min)	Name of the compound	Molecular formula	Molecular weight g/mol	Peak area (%)	Structure of compounds	Biological activity
1.	4.62	Apigenin	C ₁₅ H ₁₀ O ₅	270.237	0.35		Antioxidant, antimutagenic, anticarcinogenic, anti-inflammatory, and antiproliferative activities [1,5,11]
2.	6.78	alpha-Pinene	C ₁₀ H ₁₆	136.2340	8.77		Antimicrobial, apoptotic and antibiotic [9,15,21]
3.	7.46	Camphene	C ₁₀ H ₁₆	136.2340	2.29		Antioxidant, antimicrobial, apoptosis [30-32]
4.	7.60	Yomogin	C ₁₅ H ₁₆ O ₃	244.29	2.74		Anti-inflammatory [24,28,29]
5.	8.11	Germacrene-D	C ₁₅ H ₂₄	204.3511	4.85		Antimicrobial [24,33,35]
6.	8.21	β-Myrcene	C ₁₀ H ₁₆	136.2340	1.6		Analgesics, anti-diabetic, antioxidant, anti-inflammatory [24,28,29]

7.	8.88	Limonene	C ₁₀ H ₁₆	136.23	0.26		Antitumor, antiviral, anti-inflammatory, and antibacterial [24,30-32]
8.	9.33	Isofraxidin	C ₁₁ H ₁₀ O ₅	222.1941	2.21		Anti-bacterial, antioxidant, anti-depressive, and anti-inflammatory [16,24,28,29]
9.	9.50	Camphor	C ₁₀ H ₁₆ O	152.2334	1.2		Antimicrobial, antifungal, bactericidal, and antiparasitic properties [16,30,31]
10	9.77	1,8-cineol	C ₁₀ H ₁₈ O	154.2493	11.3 5		Anti-inflammatory, antioxidant, antimicrobial [1,2,5,8,14]
11	10.53	Santolina triene	C ₁₀ H ₁₆	136.2340	0.7		Antimicrobial, anti-inflammatory 1,5,30-32,33,35]
12	11.59	Artemisia alcohol	C ₁₀ H ₁₈ O	154.25	5.62		Antimicrobial [24,33,35]
13	12.33	Borneol	C ₁₀ H ₁₈ O	154.2493	11.1 2		Antioxidant, anti-inflammatory [22,25]
14	13.02	Cirsilineol	C ₁₇ H ₁₄ O ₇	344.0896	2.25		Antioxidant, anticancer, antibacterial, and immunosuppressive

							activity [33,35,43]
15	13.23	Thujone	C ₁₀ H ₁₆ O	152.2334	0.12		Antioxidant, anti-inflammatory [1,2,5,8,14]
16	13.69	Quercetin	C ₁₅ H ₁₀ O ₇	302.2357	0.39		Antioxidant [11,22,25]
17	13.84	Grandisol	C ₁₀ H ₁₈ O	154.25	28.45		Antimicrobial [1,2,5,8,14]
18	14.65	Naringenin	C ₁₅ H ₁₂ O ₅	272.257	0.53		Antidiabetic, gastroprotective, anticancer, antiobesity, immunomodulator, cardioprotective, antimicrobial, nephroprotective [1,2,5,8,11,19]
19	15.53	Artemisia ketone	C ₁₀ H ₁₆ O	152.233	3.12		Antimicrobial [24,33,35]
20	16.74	β-caryophyllene	C ₁₅ H ₂₄	204.36	5.67		Antibacterial, antioxidant, gastroprotective, anxiolytic, anti-inflammatory [1,2,5,8,14, 24,33,35]

21	17.33	Copaene	C ₁₅ H ₂₄	204.36	1.41		Cytotoxicity, antiviral, antibacterial, anti-inflammatory [1,5,8,14,43]
22	17.81	α -amyrin	C ₃₀ H ₅₀ O	426.7174	0.1		Antinociceptive and anti-inflammatory [30-32]

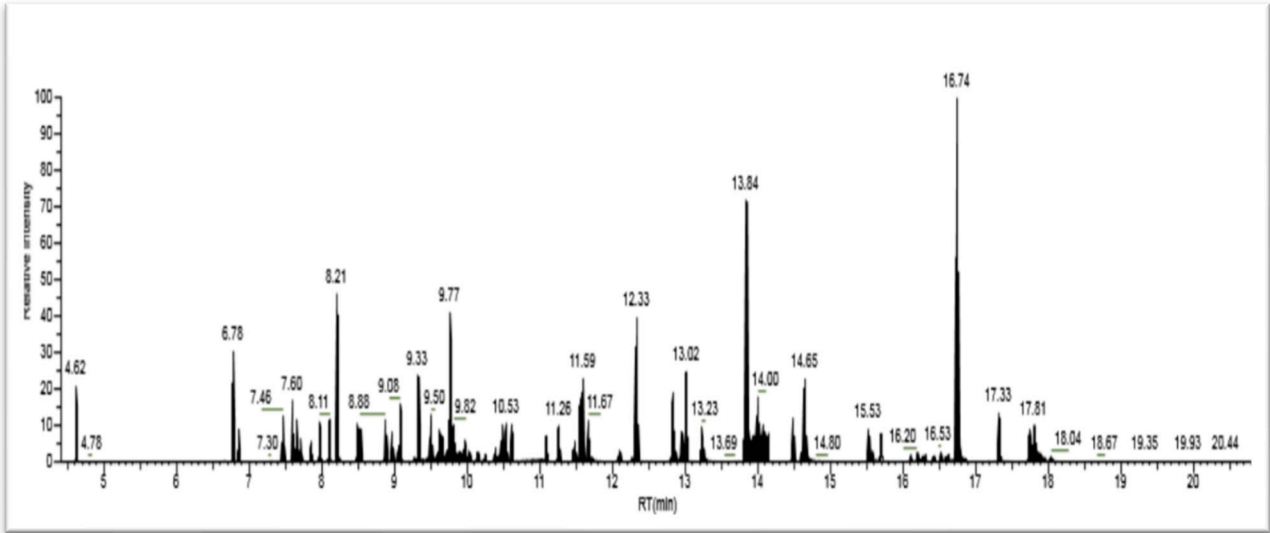


Figure S1. Gas chromatography mass spectrometry of *Artemisia vestita* leaf extract (ALE).