

Sudheer W N, Praveen N. Phytochemical, pharmacological and tissue culture studies of some important species of genus *Barleria* L. (Acanthaceae) - a review. *Plant Science Today*. 2021;8(3):491-500. <https://doi.org/10.14719/pst.2021.8.3.1117>

Supplementary Table & Figure

**Table 1.** Some important phytochemicals present in different species of *Barleria* L.

Sl. No	Name of the Plant	Phytochemicals	Pharmacological action	References
1	<i>Barleria prionitis</i> L.	Scutellarein 7-rhamnosylglucoside	-	(6)
		Acetyl Barlerin A	GST, AChE inhibitory and free radical scavenging activities	(7)
		Acetyl Barlerin B		
		Balarenone	Inhibitory activity against glutathione S-transferase (GST), acetylcholinesterase (AChE) and anti-bacterial activity	(9)
		Barlerinoside	Inhibitory activity against glutathione S-transferase (GST)	(10)
		Shanzhiside methyl ester	GST, AChE inhibitory and free radical scavenging activities	(11)
		Acetyl Barlerin (6,8-O,O-diacetylshanzhiside methyl ester)		
		Barlerin (8-O-acetylshanzhiside methyl ester)	Angiogenesis and improves functional recovery after stroke (28) and has anti-fibrinolytic activity (29)	
		Ipolamiidoside	-	(12)
		6-O-acetylshanzhiside methyl ester	Inhibition of nuclear factor and brain protection	
6-O-p-methoxy-cis-cinnamoyl-8-O-acetylshanzhiside methyl ester	-	(13)		
6-O-p-methoxy-trans-cinnamoyl-8-O-acetylshanzhiside methyl ester	-			
6-O-p-cis-coumaroyl-8-O-acetylshanzhiside methyl ester	-			
6-O-p-trans-coumaroyl-8-O-acetylshanzhiside methyl ester	GST, AChE inhibitory and free radical scavenging activities			
Lupilinoside		Anti-viral activity (HSV-1)	(14)	
2		8-O-acetylpolamiidic acid		
		8-O-acetyl-6-O-(p-methoxy-cis-cinnamoyl)shanzhiside	Enhancement of Alkaline phosphatase	(15)
		8-O-acetyl-6-O-(p-methoxy-trans-cinnamoyl)shanzhiside		
		Chakyunglupulin A	Anti-fungal activity	(16)
		Chakyunglupulin B		
		4-ethylcatechol		
		4-vinylcatechol	Activation of the Nrf2 cell defense pathway	(17)
		4-methylcatechol		
		Barlupulin A		
		Barlupulin B		
		Barlupulin C	-	(18)
		Barlupulin D		
		Barlupulin C methyl ester (chemotaxonomic marker for <i>B.lupulina</i> )	-	(19)
		Cyclobutane, 1,1- dimethyl- 2-octyl		
1-Hentetracontanol	Anti-microbial activity	(20)		
1,2-Benzenedicarboxylic acid, diisooctyl ester				
2-Hexyl-1-octanol				
3	<i>Barleria buxifolia</i> L.	Barleriaquinone (Pigment)	-	(21)
4	<i>Barleria strigosa</i> Willd.	Striogoside	-	(22)
		10-O-trans-coumaroyl-eranthemoside		
		Parvifloroside A	Potential anti-oxidant activity	(23)
Parvifloroside B				
5	<i>Barleria trispinosa</i> Vahl.	6- $\alpha$ -L-rhamnopyranosyl-8-O-acetylshanzhiside methyl ester	-	(24)
6	<i>Barleria acanthoides</i> Vahl.	Barleriside A	Superoxide scavenging activity	(25)
		Barleriside B		
		Barlericin	-	(26)

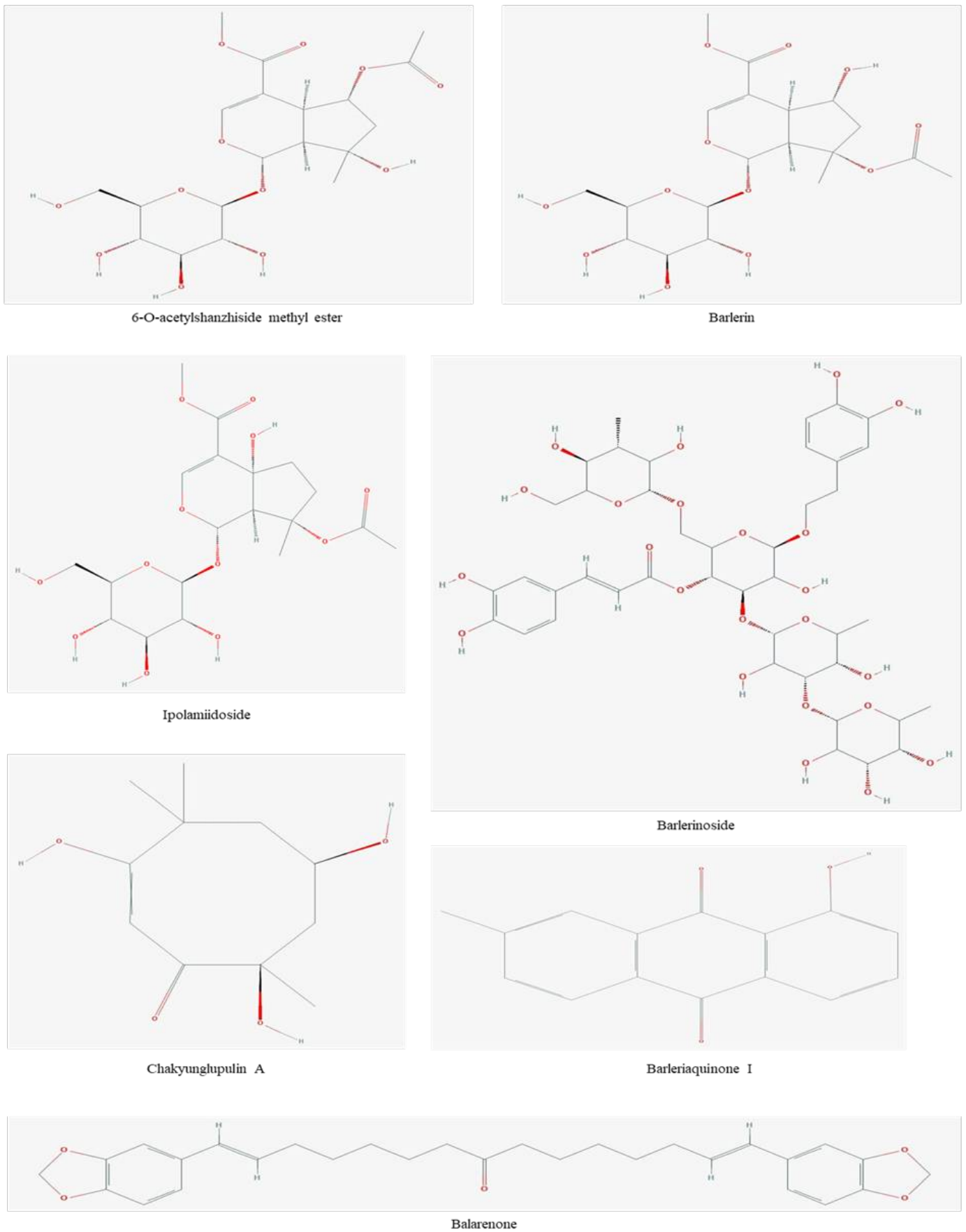


Fig. 1. Molecular structure of important metabolites in the genus *Barleria*. [Source-PubChem - <https://pubchem.ncbi.nlm.nih.gov/>]