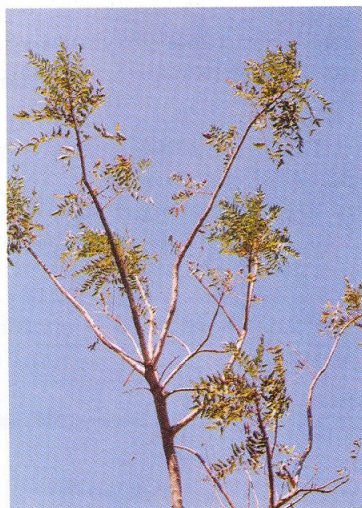


3 | *Boswellia serrata* Roxb. ex Colebr. (Śallakī)

The drug consists of oleogum resin of *Boswellia serrata* Roxb. ex Colebr. (Plate 3.1 A & B); Fam. Burseraceae. The plant is a medium or large tree found in Vindhyan and Satpura hills of Deccan, Bihar, Orissa and North Gujarat and Aravali hills of Rajasthan.



A. Plant



B. Oleogum resin

Plate 3.1 *Boswellia serrata* Roxb. ex Colebr.

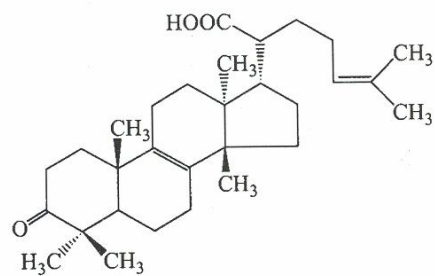
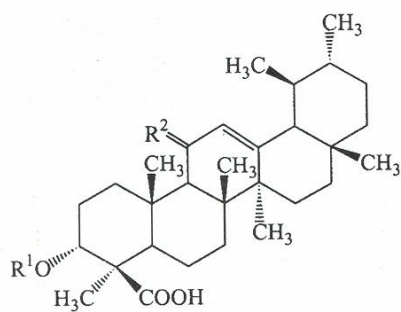
Chemical Constituents

Major

Volatile oil (9 per cent), gum and resin; the volatile oil contains α -thujene, α -phellandrene, β -phellandrene, α -terpineol, limonene, camphene, myrcene, α -terpene, *p*-cymene²; active principles boswellic acids from resin viz., α -boswellic acid, β -boswellic acid, 3-*O*-acetyl- β -boswellic acid, 11-keto- β -boswellic acid, 3-*O*-acetyl-11-keto- β -boswellic acid^{3,4}.

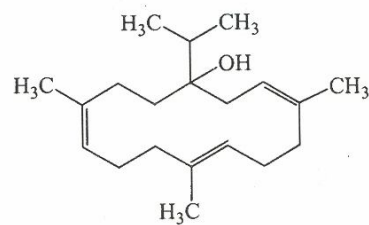
Minor

A diterpene alcohol serratol⁵ and four tetracyclic triterpene acids 3- α -acetoxytirucall-8,24-dien-21-oic acid, 3-ketotirucall-8,24-dien-21-oic acid, 3- α -hydroxytirucall-8,24-dien-oic acid, 3- β -hydroxytirucall-8, 24-dien-21-oic acid⁶.



3-Ketotirucall-8,24-dien-21-oic acid

- | | | |
|---------------------|---------------------------------|---|
| R ¹ = H | R ² = H ₂ | <i>β</i> -Boswellic acid |
| R ¹ = Ac | R ² = H ₂ | <i>O</i> -Acetyl- <i>β</i> -boswellic acid |
| R ¹ = H | R ² = O | 11-keto- <i>β</i> -boswellic acid |
| R ¹ = Ac | R ² = O | 3- <i>O</i> -Acetyl-11-keto- <i>β</i> -boswellic acid |



Serratol