



## CUTCH AND KATHA: THE HEARTWOOD TREASURES OF THE KHAIR TREE

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### INTRODUCTION

The Khair tree (*Senegalia catechu*), also known as Acacia catechu, is a medium to large deciduous tree native to South Asia. This tree is highly valued for its economic and medicinal properties, primarily due to the products derived from its heartwood: cutch and katha. These products are extensively used in various industries, ranging from textiles to traditional medicine.

### EXTRACTION PROCESS OF CUTCH AND KATHA

#### 1. Harvesting and Preparation

The process begins with the harvesting of mature Khair trees, typically around 30 years old, to ensure a high concentration of the desired compounds in the heartwood. The heartwood is separated from the rest of the tree and cut into smaller pieces for further processing.

#### 2. Extraction of Cutch

**Chopping and Boiling:** The heartwood is chopped into small pieces and boiled in water. This boiling process extracts the tannins and other soluble compounds from the wood.  
**Concentration:** The liquid extract is then concentrated by evaporating the water over a low flame until a thick, dark paste is obtained.  
**Drying:** The paste is dried to form solid cakes of cutch, which can be ground into a powder.

This powder is used primarily in the dyeing and tanning industries.

#### 3. Extraction of Katha

**Boiling and Filtration:** Similar to cutch extraction, the heartwood is boiled, but the process for katha involves a more refined and prolonged boiling and filtration to separate the katha from the less soluble cutch.

**Cooling and Crystallization:** The concentrated liquid is cooled to allow katha to crystallize. These crystals are then collected, washed, and dried to produce the final product. Katha appears as a solid, crystalline substance used in various applications, particularly in the preparation of betel quid (paan).

### APPLICATIONS OF CUTCH AND KATHA

#### Cutch

- 1. Textile Dyeing:** Cutch is extensively used as a natural dye for textiles. It imparts a range of brown shades, which can vary depending on the mordants used. The dye is valued for its eco-friendliness and is often used in traditional and sustainable textile dyeing practices.
- 2. Leather Tanning:** The tannins in cutch make it an effective tanning agent, producing durable and aesthetically pleasing leather goods. The tannins help in stabilizing the collagen fibers in

the leather, making it less prone to decomposition and giving it a rich brown color.

3. **Traditional Medicine:** Cutch is used in traditional medicine for its antiseptic and astringent properties. It is applied to wounds and ulcers to promote healing and reduce inflammation.

### **Katha**

1. **Betel Quid (Paan):** Katha is a key ingredient in betel quid, a traditional chewing product in South Asia. It is combined with betel leaf, areca nut, and sometimes tobacco. Katha adds a distinct flavor and has mild astringent properties.
2. **Traditional Medicine:** In Ayurvedic medicine, katha is used to treat mouth ulcers, sore throats, and diarrhea. It has antimicrobial and anti-inflammatory effects, making it useful for various health conditions.
3. **Food Additive:** Katha is also used as a food additive in traditional South Asian cuisine, particularly in the preparation of certain types of pickles and chutneys.

### **CONCLUSION**

The Khair tree is a vital resource for many traditional and modern applications. The extraction of cutch and katha from its heartwood involves meticulous processes that yield products of significant economic and cultural importance. Cutch is primarily used in the textile and leather industries, while katha finds applications in traditional medicine and as a key ingredient in betel quid. These products highlight the multifaceted utility of the Khair tree and underscore its economic, medicinal, and cultural significance.