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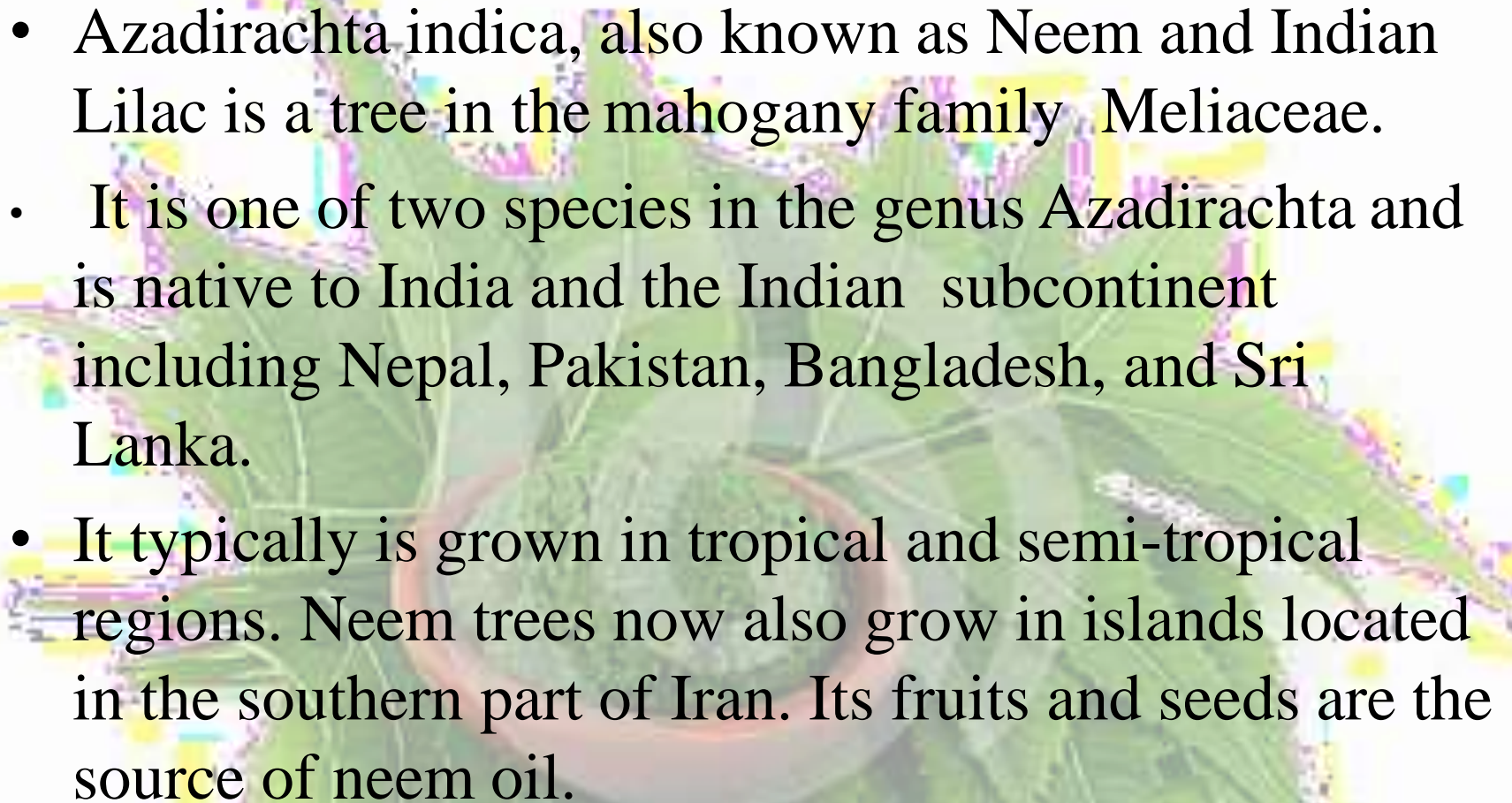


NEEM

CLASSIFICATION



- Common Name – **Neem**
- Botanical Name – *Azadirachta Indica*
- Kingdom – Plantae
- Division – Magnoliophyta
- Class – Magnoliopsida
- Order – Sapindales
- Genus – *Azadirachta*
- Species – *A. indica*
- Family – Meliaceae

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- *Azadirachta indica*, also known as Neem and Indian Lilac is a tree in the mahogany family Meliaceae.
 - It is one of two species in the genus *Azadirachta* and is native to India and the Indian subcontinent including Nepal, Pakistan, Bangladesh, and Sri Lanka.
 - It typically is grown in tropical and semi-tropical regions. Neem trees now also grow in islands located in the southern part of Iran. Its fruits and seeds are the source of neem oil.



- Neem is a fast-growing tree that can reach a height of 15–20 m, rarely to 35–40 m. It is evergreen, but in severe drought it may shed most or nearly all of its leaves. The branches are wide spread.
- It blossoms in spring with the small white flowers. It has a straight trunk. Its bark is hard rough and scaly, fissured even in small trees. The color of the bark is brown grayish. The leaves are alternate and consist of several leaflets with serrated edges. Its flowers are small and white in color. The olive like edible fruit is oval, round and thin skinned.





Economic uses of neem

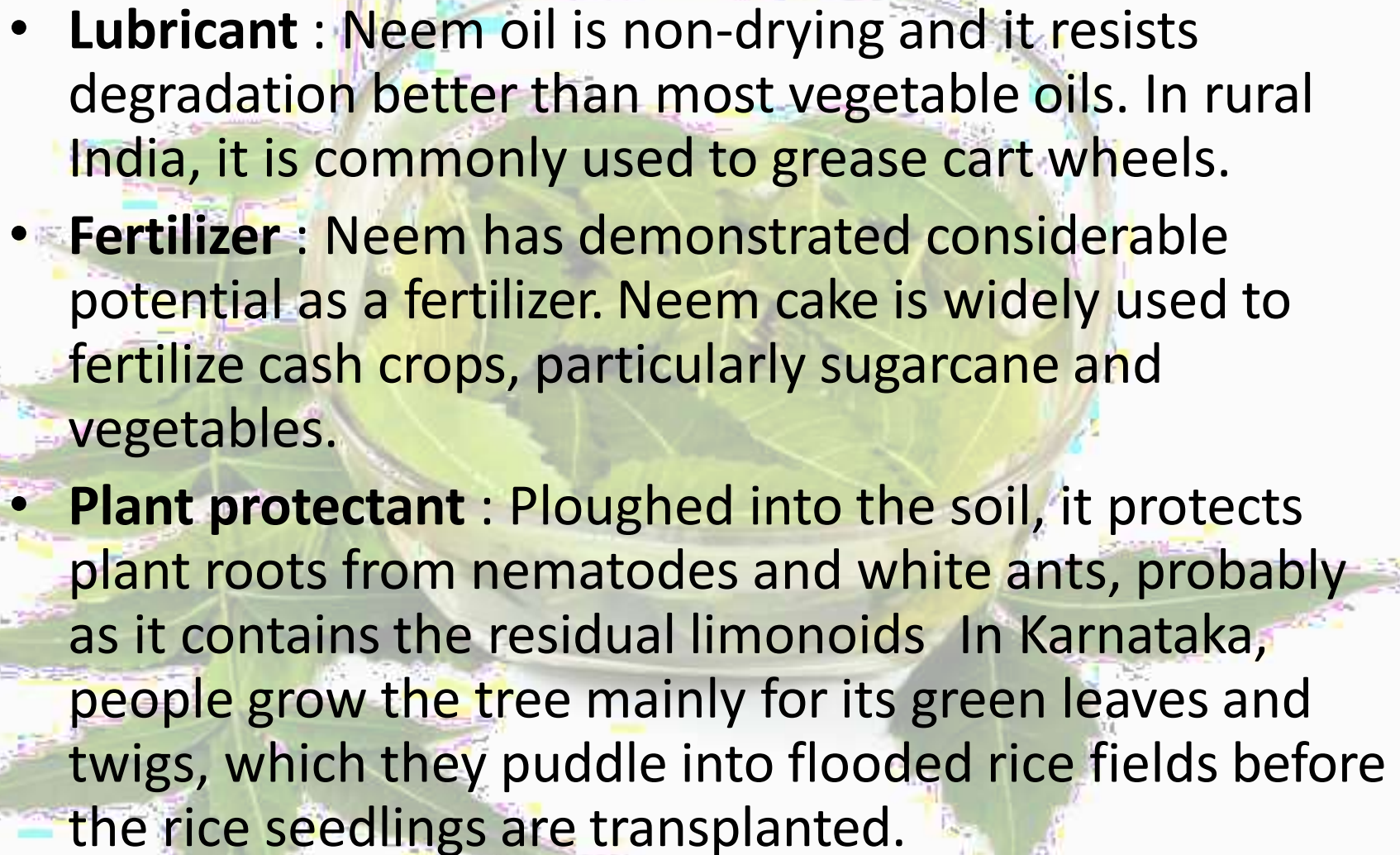
- **Toothbrush:** Traditionally, slender neem twigs (called datun) are first chewed as a toothbrush and then split as a tongue cleaner
- This practice has been in use in India, Africa, and the Middle East for centuries. Many of India's 80% rural population still start their day with the chewing stick, while in urban areas neem toothpaste is preferred.
- Neem twigs are still collected and sold in markets for this use, and in rural India one often sees youngsters in the streets chewing on neem twigs.

- **Resin** : An exudate can be tapped from the trunk by wounding the bark. This high protein material is not a substitute for polysaccharide gum, such as gum arabic. It may, however, have a potential as a food additive, and it is widely used in South Asia as "Neem glue".
- **Bark** : Neem bark contains 14% tannin, an amount similar to that in conventional tannin-yielding trees (such as *Acacia decurrens*).
- **Honey** : In parts of Asia neem honey commands premium prices, and people promote apiculture by planting neem trees.



- **Toiletries:** Neem oil is used for preparing cosmetics such as soap, shampoo, balms, and creams as well as toothpaste
- **Animal Treatment:** Used to treat sweet itch and mud fever in horses
- **Tree:** Besides its use in traditional Indian medicine, the neem tree is of great importance for its anti-desertification properties and possibly as a good carbon dioxide sink
- **Neem gum** is used as a bulking agent and for the preparation of special purpose foods



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- **Lubricant** : Neem oil is non-drying and it resists degradation better than most vegetable oils. In rural India, it is commonly used to grease cart wheels.
 - **Fertilizer** : Neem has demonstrated considerable potential as a fertilizer. Neem cake is widely used to fertilize cash crops, particularly sugarcane and vegetables.
 - **Plant protectant** : Ploughed into the soil, it protects plant roots from nematodes and white ants, probably as it contains the residual limonoids. In Karnataka, people grow the tree mainly for its green leaves and twigs, which they puddle into flooded rice fields before the rice seedlings are transplanted.

MEDICINAL USES



- All parts of Neem tree used as antihelmintic, anti-fungal, anti-diabetic, antibacterial, antiviral, contraceptive and sedative.
- Neem tree is used in many medicinal treatment like skin diseases, healthy hair, improve liver function, detoxify the blood, Pest and disease control, fever reduction, dental treatments, cough, asthma, ulcers, piles, intestinal worms, urinary diseases etc.

- **Against pox viruses** : In India, people who are affected with pox viruses are generally made to lie in bed made of neem leaves and branches. The belief is that it prevents the spreading of pox virus to others and has been in practice since early centuries.

Thank you

