

XIII. DIOSPYROS AND THE MYTH OF THE FORBIDDEN FRUIT

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In the genus *Diospyros* (Greek for 'grain ∞ food of the gods') there are fruits (persimmons) that are highly valued for eating, fruits used to poison fish, and fruits that are reputed to have poisoned people. To the last category belong the terrible trio of *D. demona* Bakh. ('*daemona*'), *D. insidiosa* Bakh., and *D. perfida* Bakh., respectively demonic, insidious, and perfidious!

Diospyros insidiosa got its name from an incident in Sigli in the Aceh Province of Sumatra, reported by Bakhuijen [Bull. Jard. Bot. Buitenzorg III, 15 (1937) 142]: "Eight men who, when on patrol had eaten of these fruits, fell dangerously ill and one of them died. The Achinese likewise assert that the fruits are very poisonous."

Diospyros demona got its name by taxonomic association with *D. insidiosa*, as Bakhuijen put it (l.c. 141): "The specific name alludes to the probably very poisonous properties of the fruits as may be expected from a species so closely allied to *D. insidiosa*." The 'close alliance' was the placement of these two species within the same section in Bakhuijen's classification of *Diospyros*.

Bakhuijen gave no justification for the name *D. perfida* except this enigmatic sentence under *D. insidiosa*: "It has not been irrefutably proved that the material from Sumatra, Sigli, belong to *D. perfida* as they consist only of half a fruit with seeds." It is as if Bakhuijen could not make up his mind whether the half-eaten fruit belonged to *D. perfida* or *D. insidiosa*. I would exonerate *D. perfida* on the grounds that it is Bornean and therefore not present at the scene of the crime. *Diospyros insidiosa* is Sumatran and Malayan.

There are other weaknesses in this story. Can we believe that eight men would eat some unknown fruit found in the forest? My experience is that the taboo imprinted in childhood never to eat unknown fruits (and never to eat fruits offered by strangers) would have prevented such an event. The fruit must have been known to at least one of those men to be something perfectly safe to eat. Perhaps it was *D. diepenhorstii*, a jungle species that Bakhuijen placed in the same taxonomic section as *D. insidiosa*, and well known independently to the native peoples in Sumatra, Malaya, and Borneo to be edible.

An even more fundamental question, which I pose to readers of this article, is whether there exists any deliciously edible fruit that will poison and kill those who eat them? I think any fruit that tastes good must be safe to eat. My suspicion is that the eight men fell ill from a virus, and that Bakhuijen was too eager to believe that edible fruits could be poisonous. Unfortunately, *D. insidiosa* is a rare species, so we are unlikely to obtain fruits to test unless someone organizes a special Quest for the Forbidden Fruit.

The use of the fruits of *Diospyros* for fishing is a different matter, practised throughout SE Asia and even in the Caribbean region. Unripe fruits are pounded and cast into the water, causing fish to rise to the surface in a stupefied condition. The fruits used to poison fish cannot poison people because they are too unpleasant for humans to eat, as anyone who has tried to eat an unripe persimmon will quickly discover.

Editor's note: A request was put on TAXACOM for information on fruits that look, smell, and taste all right, yet are poisonous. It seems that European Deadly nightshade, *Atropa belladonna* (*Solanaceae*) is an example, while mention has also been made of the Caribbean Manchineel, *Hippomane mancinella* (*Euphorbiaceae*). The drupes of this beach tree have the appearance of an apple with a pleasant odour and agreeable taste, but are very dangerous to eat. Stories are reminiscent of the famed Upas tree, *Antiaris toxicaria* (*Moraceae*), of which it was said that one would be poisoned by just approaching it. In Florida the species is on the endangered species list, because it is destroyed wherever met. When I asked someone whether there were any in Botanical Gardens, he retorted shocked, "You wanna get sued??"

In W Africa there is Akee apple, *Blighia sapida* (*Sapindaceae*). The white aril cooked or raw is edible, but the pink to red funicle and seed contain deadly amounts of hypoglycin A and B. The fruit has to be perfectly ripe, otherwise it will cause 'vomiting sickness' due to depletion of liver glycogen and severe hypoglycaemia. Parrots are said to 'know' this and carefully remove the flesh before eating. The fruit seems more of the *Taxus* type (partly edible, partly poisonous). For more technical details see H.M. Burkill (2000, cited in the Bibliography).

In Queensland, Australia, there are two examples:

The Spice bush, *Triunia erythrocarpa* (*Proteaceae*) has tempting, red prunes. According to some the flesh would be edible, others claim that and the pits are very poisonous. Tony Irvine took a bite and landed up in hospital. Some smaller rat-like marsupials eat the fruit without any effect.

In the Aru Islands and Queensland there is also the Finger cherry, *Rhodomyrtus macrocarpa* (*Myrtaceae*) with finger-like red, nice-looking juicy fruits. Reports vary, but it is repeatedly said they can permanently blind you. Van Balgooy (Muurkrant Oktober 2000: 15; house organ of L) wrote that he has eaten a lot when in the Aru Islands without ill effect. Perhaps this variable effect is due to a fungal infection that some fruits have and others not. These fruits then would belong to the Ergot (*Claviceps*) class (toxicity secondary), and are no Apples of Paradise.

Van Balgooy also mentioned *Limacia oblonga* (*Menispermaceae*, a family well-known for its high content of alkaloids), that were sweet and juicy, but possibly caused a giant attack of diarrhoea, and so may be a relatively mild example.

Does anybody have more examples for such Paradise Apples that don't expel you from Paradise but take you there? — J.F. Veldkamp