

FIFTY PLANTS

Bill Laws' *Fifty Plants That Changed the Course of History* (224pp, Quid Publishing, 2010) details how battles were won or lost, countries enriched or pauperized – even the shape of the human face changed – through humans' interactions with plants.

Plants have colonized our planet for 470 million years, controlled erosion, regulated carbon dioxide and oxygen, and given us fossil fuels and drugs, both harmful and helpful. But as Laws reminds us, we can't take their gifts for granted.

Laws simply lists them, with scientific names (themselves often fascinating), their native range, type (vine, shrub, tree, etc.), height and uses – edible, medicinal, commercial, practical – along with their surprising histories.

The oldest, ferns (Filicinophyta), from the lost supercontinent of Pangea, have been with us for 335 million years. They once grew to 30 feet, and the coal and petrochemicals extracted from their decayed remains have allowed both the Industrial revolution and global warming. By 2000 we were consuming 2 million years of fossilized ferns and trees yearly – “an orgy of consumerism,” as one critic put it, “wrecking the planet.”

Several of the others – Coca, Upland Cotton, Sugarcane, Tobacco and Opium poppy – provide similarly mixed bags of curses and blessings.

Chewing leaves of Coca, which brought us Coca Cola, allowed Andeans to carry heavy loads for many miles in thin mountain air. Once the conquistadors and the slavers

discovered its powers they used it to help their victims survive brutal conditions in mines and on shipboard. By 1900 cocaine was a common recreational drug and toothache remedy.

Upland cotton, a bulwark of southern slavery, cost more in human misery than any of its rivals – flax, silk, wool, etc. Since it quickly exhausts soil, it helped spur U.S. western expansion and the displacement of Native Americans. Today it's sprayed with more chemicals than any other crop.

The more recent history of Sugarcane, first refined 2500 years ago on the banks of the Ganges, is also tied up with slavery. Slaves worked the West Indian cane fields, and the profits helped fuel the Industrial revolution in England and elsewhere.

Hailed as a miracle cure when first imported to Europe from South America, Tobacco as late as the mid-20th century was cherished as a comforting addiction, despite jokes about “coffin nails.” As of 2010, someone somewhere dies of a tobacco-related disease every 8 seconds.

When China, contentedly self-contained for centuries, refused to open its borders to Western trade, Britain, France and the U.S. set out to addict as many Chinese as possible with Opium, at one point enforcing its introduction with gunboats. So successful was this campaign that a debilitated China began to recover only after WWII, under Mao. The Opium poppy gives us both morphine, so wonderful at alleviating pain, and heroin.

Anyone who's drunk seriously for even a single evening will acknowledge the accuracy of Guido Reni's 1623 "Bacchus," a naked, vine-capped cherub simultaneously chugalugging wine and urinating. The juice of the Wine grape, fermented for at least 5,000 years, was once the drink of everyone from infant to elders – much safer than water. Spread by the Romans, cherished and preserved by the Monasteries, wine is today a \$100 billion industry.

The Declaration of Independence was printed on Hemp paper – a sustainable substitute for wood pulp, along with sugar cane, papyrus, rice straw and maize.

Quinine, from Chinchona, with its ally malaria, helped U.S. troops to defeat the Japanese in the S. Pacific in WWII.

Barley and other grains shaped humans' faces, as they developed "the grinding, edge-to-edge bite required by a cereal diet."

In 1637 a tulip bulb sold for 6,700 Dutch guilders, 50 times the yearly average income.

Linnaeus, the great plant classifier, called Cacao (chocolate) Theobroma, "food of the gods."
He got that one right.