Some Medicinal Plants of the Lyman Conservatory

By Irene Soulos
Smith College Botanic Garden Summer Intern 2015

Many of our medicines come from plants. Some medicines, like herbal teas, obviously come from plants. It is less apparent that others, like aspirin, or the chemotherapy drug vincristine, are derived from plants. However, from teas and tinctures to ointments and pills, plants are omnipresent in our traditional and modern medicines.

Often, the only factor that differentiates medicine from poison is dosage. We use the seemingly harmless herb rosemary to flavor our foods and treats ailments like headaches, seizures, comas, and even death. This is why even herbal medicines should only be used under the instruction of medical professionals.

The medicinal plants that we use today come from all over the world. Our cough drops are made from Australian eucalyptus. Native to central and southern Asia, medicinal marijuana is used to treat nausea, pain, and anxiety. Humans worldwide rely on each other to share medicinal plants and knowledge. The use of plants as medicine is a practice that unites all people on Earth.
Succulent House

Aloe (Aloe vera)
Widely used, aloe has a 13 billion dollar market value in the medical and cosmetic industries. A slippery, clear gel in the leaves protects and heals burns and scrapes when applied topically. The yellow liquid from the base of the leaves, called bitter aloe, stimulates contractions of the colon when ingested, and is used as a laxative.

Mexican Yam (Dioscorea mexicana)
The natural habitat of the Mexican yam ranges from Southern Mexico to Panama. A steroidal substance extracted from the root can be used to synthesize the human hormone progesterone, which helps prevent pregnancy by thinning the uterine lining and thickening cervical mucus. After the synthesis process was discovered, scientists made the first oral contraceptive, which was a huge leap forward in the movement for women’s reproductive rights.

Show House

Rosemary (Rosmarinus officinalis)
Native to dry areas of the Mediterranean, this evergreen shrub contains essential oils and the compound rosmaricine, both of which relieve pain and stimulate the nervous system. Both Ancient Greek and modern folk medicine utilize rosemary to stimulate blood flow to the brain, improving concentration and memory. It is also used to alleviate migraines and headaches.

Palm House

Curare (Chondrodendron tomentosum)
A vine native to tropical South America and Panama, curare can climb as high as a ten-story building. The compound tubocurarine, which is extracted from the leaves and roots, is a powerful muscle relaxant. In South America, a dart poison made from curare is used on the tips of hunting arrows to paralyze game. Tubocurarine is also used in modern-day anesthetics.

Ginger (Zingiber officinale)
Now recognized in modern medicinal practice, this tropical Asian plant, has been used for centuries in traditional medicine. Its fibrous, yellow rhizome can be utilized both fresh and dry as an antiseptic and to relieve nausea and digestive ailments. A 1990 study published in the journal Anaesthesia concluded that ginger reduced postoperative nausea as effectively as a nausea pharmaceutical.

Turmeric (Curcuma longa)
This ginger family member has a vibrant orange rhizome that has long been used in dyes, curries, and medicines by peoples of India and southern Asia. Formal research in the 1970s confirmed the belief that turmeric has potent anti-cancer, antifungal, and antiseptic properties. Some studies show that turmeric has anti-inflammatory properties that surpass those of hydrocortisone. Turmeric is used topically to treat skin conditions such as eczema, athlete’s foot, and psoriasis, and is taken orally to treat acne.