Of interest this week at Beal...

Oregon grape  
*Mahonia aquifolium*

Family: the Barberry family, Berberidaceae.  
Also called Holly-leaf barberry, Grape-root, Rocky mountain grape, Mountain grape

The striking pinnately compound leaves with each leaflet resembling a Christmas holly is the hallmark of the Oregon grape. Today, its bronze winter foliage, its pure yellow spring flowers and its powder-blue berries have made it a staple of the landscaping industry.

Before European contact, this plant enjoyed wide popularity as an edible and medicinal berry. For Indigenous Americans from western Nebraska to the mountains of Arizona and the Rockies of British Columbia, the Oregon grape offered food in the form of its berries that ripen in late summer. In addition, there were several medicinal uses that included treatments for arthritis, diarrhea, jaundice, and fever. The acid-flavored berries have been made into a variety of confections and have been useful as a source of vitamin C (antiscorbutic).

However, recent analysis has highlighted the significant quantity of the alkaloid berberine present in the berries. While berberine is thought to contribute medicinal activities to some medicinal herbs (e.g. Golden-seal root, *Hydrastis canadensis*) it is considered by many to be too potent to qualify as a food item.

*Mahonia* is included in the barberry family, the Berberidaceae, a family of 16-18 genera and approximately 600 species, mostly headquartered in moderate areas in the middle temperate zones. The genus *Mahonia* was erected to include specimens otherwise consistant with the genus *Berberis*, but which had pinnately compound leaves.

*Mahonia aquifolium* is usually easy to cultivate. It will tolerate a variety of soils, including heavy clay, and dry gravelly loam. On really dry sites, an annual mulch is usually sufficient to ensure survival. It also performs well in the dense shade

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of larger trees. They tolerate pruning, even into older wood and usually generate enough sucker shoots to become a large-scale ground cover, if one doesn’t become impatient with the speed of coverage.

An anti-mutagen is a substance found capable of protecting against the genetic damage produced by a mutagen. Research published in 2002, shows that the Mahonia medicinal component, berberine, is capable of significant anti-mutagenic activity when tested against the activity of the direct chemical mutagen acridine orange.

While Mahonia aquifolium has a long history in colloquial medicine as an agent for healing the skin, studies published in 2005 and 2007 demonstrated its potential for use in the treatment of plaque psoriasis and atopic dermatitis respectively.