Of interest this week at Beal...

Blue False Indigo
*Baptisia australis*

Family: the Pea or Bean family, the Fabaceae

Blue false indigo, *Baptisia australis*, is a showy native perennial that is unusually drought resistant. Now that it is autumn, the formerly purple-blue flowers of May and June have yielded striking black seed pods amongst the soft blue green foliage (see next page also). This pea family perennial reaches from 3 to 5 feet in height and forms colonies by way of spreading rhizomes. It is these deep rhizomes that help make this species so resistant to drought. It can be cultivated from zones 3 to 6. If one starts it from seed, it may take from 2 to 3 years to reach peak flowering habit. It requires deep soil tending to be loamy, but it is nitrogen fixing, and once established, it is long lived.

Another reason to grow it besides its showy flowers is that it is a host food plant for a number of butterflies including both the orange and the clouded sulphurs, the eastern tailed blue, the hoary blue, and the wild indigo duskywing.

The genus name, *Baptisia*, means ‘to immerse’ and is probably a reference to its use as a source of blue dye. This genus was formally erected in 1811 by Robert Brown and eventually included species formerly in the genera *Sophora* and *Crotalaria*. Today, *Baptisia* includes some twenty plus species, all native to North America east of the Rockies. They all produce impressive flower spikes, blue, yellow, or white in color.

In the Indigenous First Nations, blue false indigo was used medicinally as an anesthetic applied to toothache, and even, depending upon the preparation technique, as either an emetic or as an anti emetic. A tea of the rhizomes was used as a wash to stimulate drowsy or listless infants. Recipes including blue false indigo were also employed for treatment of rattlesnake bite and as an anti inflammatory.

Our ever expanding interest in triterpenoid saponins for the development of anti cancer and anti tumor treatments have lead to the isolation of baptisiasaponin 1 from *Baptisia australis* (Udayama, Kinjo, and Nohara, *Phytochemistry*, 1998, 48, pg 1233).
In 1988, Fraser, et al. (Journal of the Chemical Society) found that Baptisia australis incorporated a class of decay compounds, cadaverines, into quinolizidine alkaloids. These alkaloids render a plant toxic to many insects, although some insects are able not only to survive these chemicals in their diets, but actually sequester them within their bodies as a chemical defense. Although quinolizidine alkaloids are often involved in livestock poisoning cases, this plant is not usually consumed by stock that encounter it in their pastures.

The striking beauty of the blue false indigo derives from the contrast of the black textured seed pods as seen against the soft green hues of the October foliage. The seeds, which do not need to be cold stratified, germinate best after soaking in warm water.