

What is in a Name? Legumes of Arizona – An Illustrated Flora and Reference

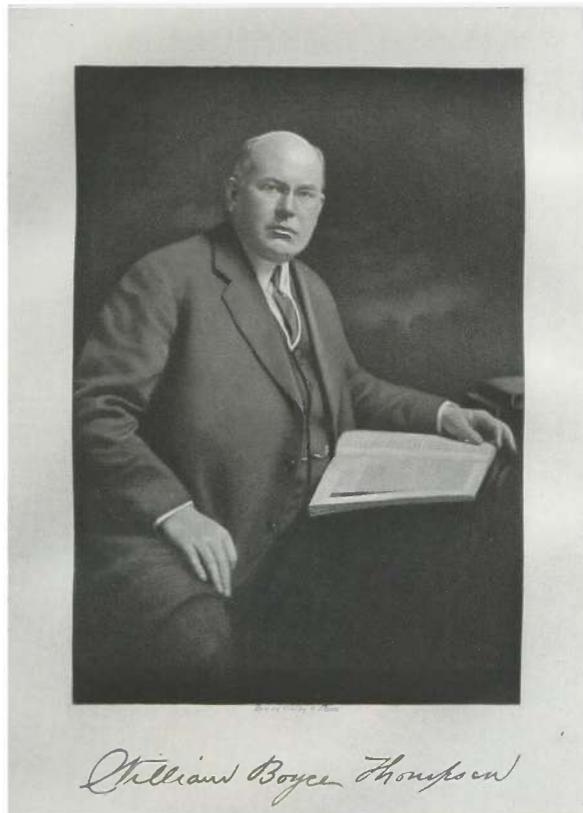
Mark Siegwarth, Director

Boyce Thompson Arboretum
37615 E Highway 60
Superior AZ 85273

Kirsten Lake, Floristics Coordinator

Desert Legume Program
The University of Arizona
Herring Hall, 1130 E South Campus Drive
Tucson AZ 85721

As the story goes, when Colonel Thompson came over the mountain ridge called Apache Leap, he was so taken by the view, he decided to build a house where he could escape the cold winters of New York at the base of Picket Post Mountain, just west of Superior Arizona. How this event came to impact the title of “Legumes of Arizona – An Illustrated Flora and Reference” is worthy of explanation.



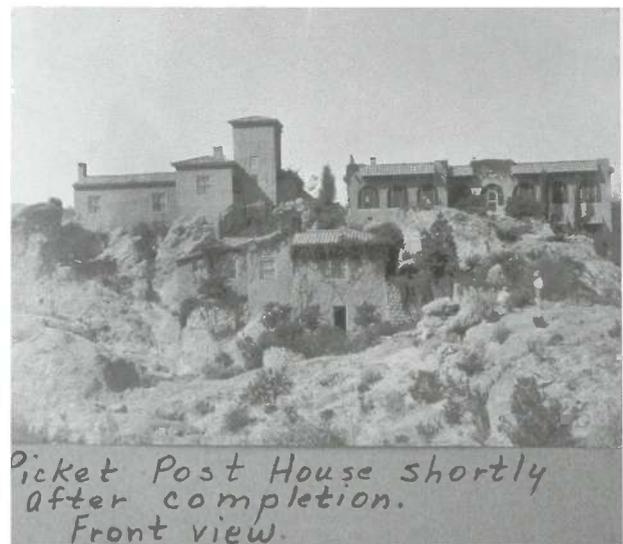
William Boyce Thompson circa 1925

The Colonel had already done what most wealthy men of his age have done and donated a portion of his time and wealth to help mankind. In 1917, the Colonel funded and

accompanied the Red Cross mission to Russia after the Czar was overthrown. The Colonel realized any change in the status of Russia as an ally during the war could change the eventual outcome. In addition to trying to keep Russia as an ally in the war, the Colonel and the Red Cross were also concerned with the hundreds of thousands of people on the verge of starvation (229). These experiences caused him to worry about the future of his own country. With projections that the population in the United States would reach 200 million, he realized the question of a primary food supply was beyond the capacity of politicians and sociologists to answer (291).

In 1924, the Boyce Thompson Institute for Plant Research in Yonkers, New York was dedicated in order to help feed, clothe and house the peoples of the world. His choice of plant research was not because Mr. Carnegie had cornered the market for libraries, but rather his experiences with the Red Cross after the Russian Revolution convinced him that no government could exist that did not feed its people (248). With the establishment of the Institute, the Colonel could now focus on his pursuits in Arizona.

Picket Post was to be a winter home, where in his later years he could enjoy both the sunrise and sunset over the beautiful desert landscape. As with the construction of any home, eventually one's mind turns to landscaping. The Colonel at first was satisfied with adding stairs and walkways and keeping everything else in its natural state. After a month or so, his need for a project overtook him and he felt additional plantings were needed. His landscaping should be not only beautiful but instructive as well. Not content with just planting junipers, he would plant all the different junipers that grew in the Southwest (304). As with those times and even today in most home improvement projects, a small project slowly evolved into a much larger one.



Picket Post house from the east, 1934.



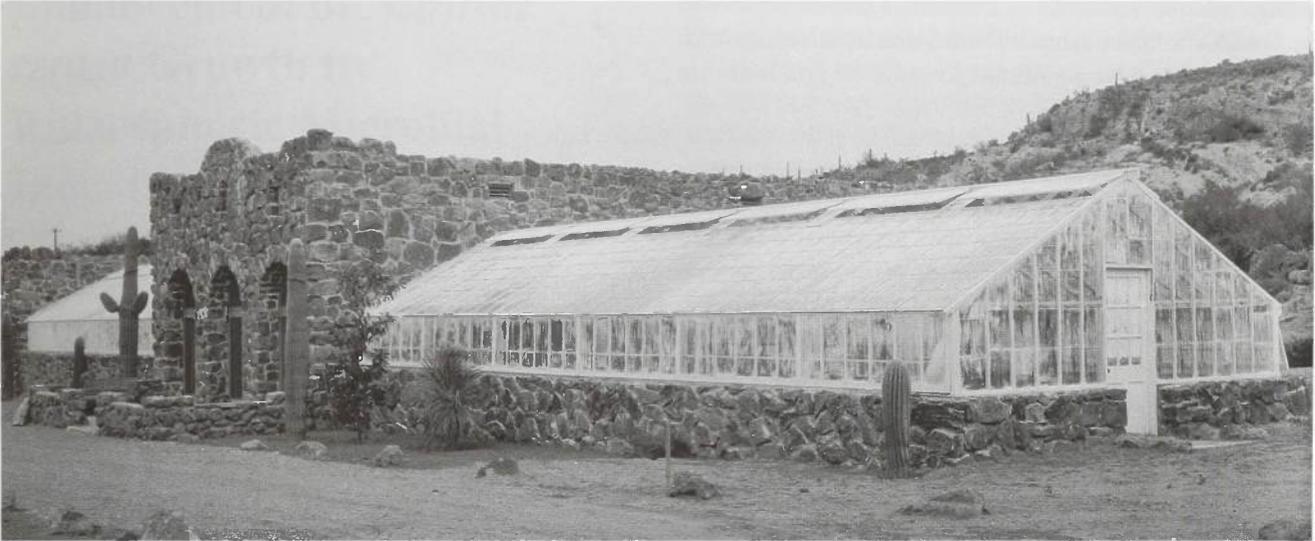
Picket Post House with early landscaping in place, 1934

His desire to plant a few trees in this new climate led the Colonel to contact the University of Arizona. The University of Arizona had started out as a territorial school in 1885 but was now a full fledged state school since Arizona's statehood in February 1912. Franklin Crider, the head of the Horticultural Department, came up to assist the Colonel and what started as an idea for a few trees became an idea for an arboretum of all the plants and trees of the Southwest (305).

The Colonel, after meeting with other experts in the state, realized that something else needed to be done. His plant institute in Yonkers was pure science but in Arizona, it would be different. He said "too little has been done to bring together and study the plants of desert countries and make the results available to the public" (305). With that thought, he founded the Boyce Thompson Arboretum. Now, more than just plants of the Southwest were contemplated as plants from around the world were added to the list.



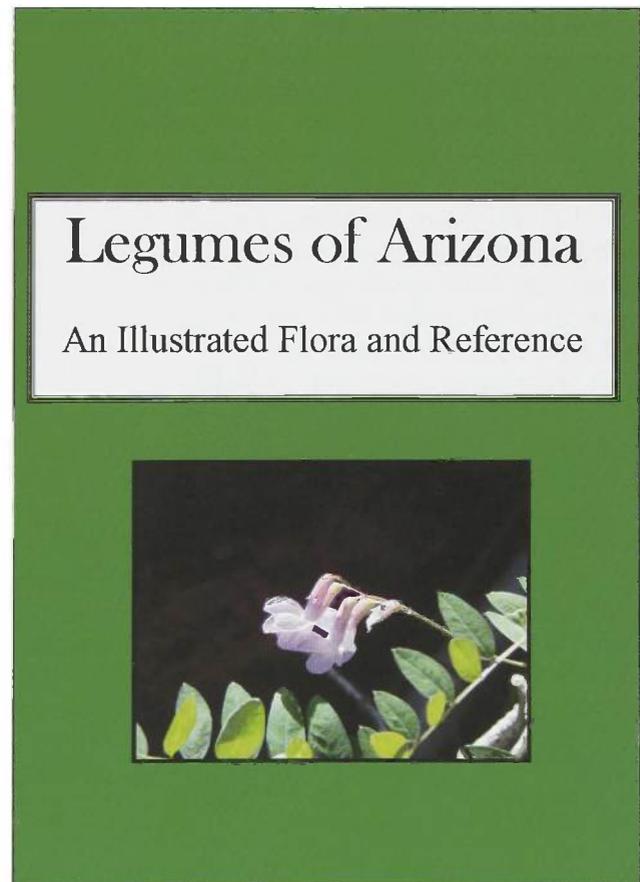
Franklin Crider, head of the Horticulture Department at the University of Arizona, addresses a womens' group, 1928



Smith Building and green house, 1926.

It is at this point where the title of our book begins to change. Normally, a scientific book would be entitled something like “Legumes of Arizona, a Flora”. However, even though plant research was still on the Colonel’s mind, in transforming his Arizona home into the most useful garden in the world, he made the mission of the Arboretum very different from the Insitute. Farmers, landscapers and homeowners alike should be made aware of the importance of plants and how to improve their landscapes as he had done. Therefore, in deference to his original dream for the arboretum, the words “and reference” were added to the title as this volume should be useful not only to the plant scientist or professional, but accessible and useful to anyone with an interest in the Legume Family in Arizona.

Now that you have a better understanding of the title, you may wonder how *Legumes of Arizona* meets the Colonel’s intent in establishing the Boyce Thompson Arboretum and why Legumes were picked in the first place. Arid and semi-arid lands account for approximately 50% of the Earth’s terrestrial surface, and these areas contain a disproportionate share of the malnourished segment of the human population. In these areas, several thousand arid-land-adapted legumes have evolved over millions of years. These plants are, for the most part, little studied and little understood despite the fact that the Legume Family is one of the most economically and agriculturally important plant families in the world. It is the third largest family of flowering plants, and it is second only to the Grass Family (cereals, grains, etc.) in importance to humans. From protein-rich food plants such as peanuts, soy beans, lentils, peas, and beans, to forage plants such as medics and clovers, to medicinal/herbal plants such as sennas and vetches, to ornamental plants such as redbuds and wisterias, to poisonous plants such as locoweeds and crazyweeds, to the many species that host nitrogen-fixing bacteria in their roots, the Legume Family impacts almost every aspect of human existence.



Proposed cover for *Legumes of Arizona*

Legumes of Arizona – An Illustrated Flora and Reference, which will include native, naturalized, and cultivated species, will be available both as a hard copy volume and an online database. Even though the information will be specific to Arizona, it will be applicable anywhere in the world that has relatively similar environmental conditions. For example, a legume crop that can be grown in southern Arizona could also be grown in various parts of Mexico, South America, Africa, Australia, Asia, etc. With a

comprehensive reference and database available, it will be possible to make more informed decisions about which legume species have significant potential for arid lands use and production.

To make it accessible and more useful, the reference section will include past and potential future uses, illustrations and photographs and details on cultivation in addition to standard plant descriptions. The addition of a specific section on cultivated taxa will also make this volume more useful to the public as it will be a reference for all legumes found in Arizona but will not confuse the scholar by blending in native and cultivated legumes together.

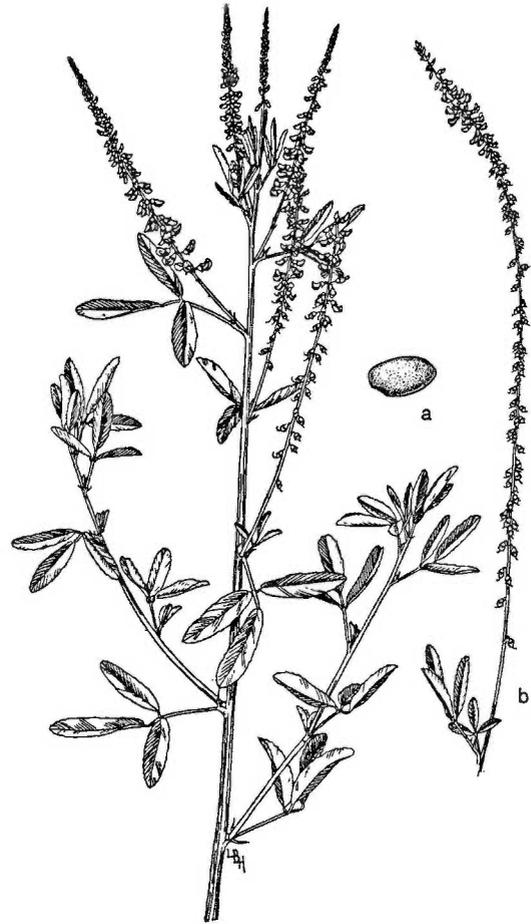
Currently in year three of this six year project, *Legumes of Arizona – An Illustrated Flora and Reference* should be available in 2012. We believe the Colonel would have heartily endorsed this project and hope that you will also.

References

Hagedorn, Hermann. 1935. *The Magnate, Biography of William Boyce Thompson*. John Day (first publisher). Boyce Thompson Arboretum 1977 (reprint).



Medicago lupulina (Lucretia Hamilton)



Melilotus albus (Lucretia Hamilton)

Sample of drawings for *Legumes of Arizona – An Illustrated Flora and Reference*