



“Black Swallowtail lays eggs on Bishop’s Weed.”

**FLORA FACTS** (Ammi caterpillar.jpg)

Scientific Name: *Ammi majus*

Common Names: Bishop’s Weed, Blister Weed

Family: Umbelliferae (Parsley)

#### Swallowtail Visits Precede Stinky Caterpillars

One of my favorite creatures is a hungry, striped and stinky caterpillar. I would say that this caterpillar performed tricks on demand. That, alas, is not always so.

“Act as though you’re going to touch this caterpillar,” I commanded a student council

member at Bowie Elementary School. She did. The caterpillar just sat there. Hundreds of students were watching for the caterpillar to do some sort of trick. I touched him (or possibly her). Two yellow “horns” emerged from the caterpillar’s head. Finally, the trick I was expecting.

Bowie Elementary dedicated a small wildscape area on May 9 to begin a larger project of adding native plants to their campus. They bought plants from Mike Heep with money the students raised. I was invited over to hear a concert and a poem, see winning artwork, meet the students, and, my favorite thing of all: dig around in the dirt planting things.

The caterpillar received a new home, at Bowie Elementary, in a rearing cage full of Bishop’s Weed. Soon it would begin to transform. Before school is out for summer, a Black Swallowtail should emerge to be set free into the world.

It will be interesting to see how well the caterpillar is received in that temporary home. Besides those “horns” for scaring off predators, it also emits a very stinky smell!

The students received a color-glossy Black Swallowtail photograph, just in case they don’t like the stinky present. I hope they’ll enjoy watching their very own caterpillar become a butterfly. Perhaps the butterfly will fly free into the world just as young students emerge into the excitement of summer vacation!

About a week before the stinky striped caterpillars munched my Bishop’s Weed, Black Swallowtail butterflies were visiting those plants. From photos, one could see that more than one swallowtail had visited. Their wing markings were of different colors. Charlie Sassine provided names for the photos, sent to him by e-mail. “They’re both the same species: Black Swallowtails,” he replied. “They’re ovipositing on one of their many preferred larval host plants, Bishop’s Weed.”

Even with a good field guide, butterflies can be very hard to identify. Males and females of the same species quite often have different markings and coloration. Why should this be surprising? After all, everyone knows that male and female cardinals look different. I discussed my surprise at that with Richard Lehman, director of Edinburg’s World Birding Center, the “Wetlands.” “It surprised me, too,” Richard said, “even though I had studied the same phenomenon in birds for many years.”

Richard has created several butterfly presentations. They’re available for viewing by local groups. They can be seen (by prior reservation) at either the Edinburg WBC Wetlands or at Valley Nature Center in Weslaco.

Isn’t this article supposed to be about plants? South Texas native plants? Yes, of course. But what better reason to plant something than to provide food for a butterfly?

Bishop’s Weed isn’t native to Texas. It originated in Europe and Asia and has been widely introduced throughout the western hemisphere. In restricted areas of Texas, it has become



naturalized, reproducing without the assistance of man. It's closely-related and similar in appearance to Queen Anne's Lace and wild carrot. It's cultivated for the cut flower trade (though when I cut it for bouquets, it drops hundreds of tiny white petals). Houston florists collect it from roadside ditches.

"It has been cultivated since the time of the Assyrians for medical uses, especially in treating angina and asthma." (Shinner's & Mahler's *Flora of North Central Texas*, 1999.)

*Useful Wild Plants of Texas, Vol. 1*, Cheatham & Johnston, 1995 contains extensive information on economic uses: Medicinal interest in *Ammi majus* and closely-related *Ammi visnaga* continues today. Khellin, a derivative of *A. visnaga*, is a potent coronary vasodilator. A derivative of khellin (Cromolyn sodium) is sold over-the-counter (Nasalcrom) to prevent and minimize respiratory allergy symptoms.

A number of pharmacologically-active substances are present, especially in unripe seed. For this reason, they are probably unsafe to consume. One such class of compounds, the *psoralens*, becomes activated by sunlight. The phototoxic nature of *psoralens* is well-documented in humans and in grazing animals. Research has proven that skin undergoes repigmentation after oral or topical administration of crystalline ammoidin (isolated from *A. majus*) followed by exposure to UV or sunlight.

The Bishop's Weed in my yard came from seed collected years ago along the frontage road near La Feria. I enjoy the lacy appearance of the flowers. The plant grows well in the pitiful growing conditions of my clay yard. Seed has germinated easily.

It would be unwise to broadcast seeds of such an introduced plant into pristine areas of native plant growth. In such places, introduced plants often crowd out native species which rightfully belong there.



In areas which have been badly disturbed for many years, like former garbage dumps and no-longer-productive farmland (like the cotton field which is now my yard), Bishop's Weed is unlikely to replace anything more valuable than guinea grass.

Because it provides food for the Black Swallowtail, Bishop's Weed is an attractive and suitable plant for the butterfly garden. In all fairness, I should mention that Black Swallowtails aren't hard to attract. They have reliably eaten all the dill I ever managed to grow in south Texas! One should also note that a number of native plants in the Umbel (Parsley) family can be used by Black Swallowtails.

Tina Wilson planted their favorite foods years ago at St. Alban's Episcopal Dayschool. Her delight at seeing hungry caterpillars was not shared by the other human beings. "I'd find squashed caterpillars all over the place!" she exclaimed. Try though she did, Tina couldn't get the message across that beautiful butterflies would be the wondrous result of all that munching.

Bishop's Weed in my yard has almost gone to seed by mid-May. Like so many other European imports, it is ill-suited to the extremes of summer in the LRGV.



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