

Need Smyrna fig, have Capri fig: A process of Caprification by Fig Wasp, *Blastophaga psenes*

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ARTICLE ID: 025

Introduction:

The ancient relationship between figs (*Ficus*, Moraceae) and its pollinating fig wasps is an uncommon example of a mutualism between plants and gall-inducing sycophiles that dwell their confined globular inflorescences that operate as microcosms (Mars et al., 2015). Aside from gall-inducing pollinators, fig inflorescences are also home to gall-inducing wasps. As a result, an integrated approach that integrates multiple domains such as life-history theory, plant mate choice, wasp sexual selection and local mate competition, plant embryology, and seed and fruit distribution is required (Trad and Mars, 2011).

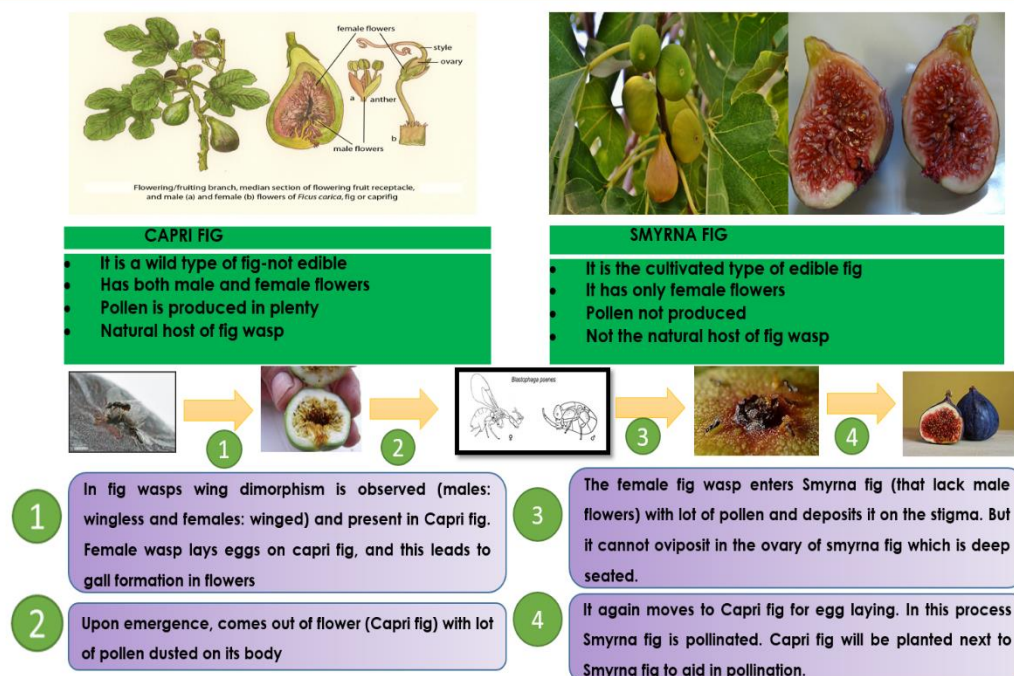
Process of caprification

In Smyrna type fig trees, artificial pollination has been carried out since ancient times by a method known as caprification, consisting in the pollination of the Smyrna figs through fig wasps (*Blastophaga psenes*) attracted to the caprifig fruit (wild figs with male flowers) hung in the branches of the domestic fig trees, which only bear pistillate flowers (Kjellberg and Valdeyron, 1984). The wasps leave the caprifigs dusted with pollen grains and pollinate the Smyrna fig inflorescences (Zohary and Hopf, 1994). Caprification refers to the process of pollination the figs. The fig wasp is only found in the Mediterranean region, but it was transported to California from Turkey in the early 1900s. Commercial producers in Syria do so by collecting male figs, hooking them on a thread, and hanging them on fig trees that require pollination. Because the local capri fig ripens late, the villagers buy male figs (also known as Capri fig) from merchants who bring their male figs from another town.

	<p>Here's the Capri figs for sale at the town market. You can see small insects emerging from the figs, these are the fig wasps</p>
	<p>After purchasing a quantity of the Capri figs they are carried over to the fig orchards to begin the process. The whole family is gathered to help.</p>
	<p>A metal string is inserted into the figs, about 8 figs to a string.</p>
	<p>Later the string figs are taken to be hung on the tree branches to start the method of pollinating the figs.</p>
	<p>The male stringed figs are then thrown on the tree, aiming towards the middle or the top of the tree is ideal.</p>
	<p>The male figs remain hung on the tree for 3-5 days as the wasps continue to emerge and pollinate the figs.</p>
	<p>The pollinated figs continue to grow developing a large size</p>
	<p>Within the next two months the pollinated figs are ready to be picked. Pollinated figs are of known to be of excellent quality. Too many stringed male figs on the tree can cause spoilage, too little and the unpollinated figs of the smyrna type will drop without maturing</p>

Reference: Source: <https://treesofjoy.com/the-process-of-caprification-pollinating-figs/>

Caprifigation by *Blastophaga psenes*



Conclusion

An integrated strategy that integrates multiple domains such as life-history theory, plant mate choice, wasp mate selection and local mate competition, plant embryology, and seed and fruit distribution is required. In this context, researchers such as plant developmental biologists, insect physiologists, chemical ecologists, and sensory biologists must work together to address the many valuable questions that can be addressed in fig-fig wasp community ecology, co-evolution, and species interaction biology using the fig inflorescence microcosm as a model system, which is inhabited by gall-inducing mutualistic and parasitic wasps.

References

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The process of Caprification, pollinating figs, 2010. <https://treesofjoy.com/the-process-of-caprification-pollinating-figs/>

