Orchids Among the Thorns, or

BY SPIRO KASOMENAKIS/PHOTOGRAPHS, UNLESS OTHERWISE CREDITED, BY THE AUTHOR

A group of Orchis italica in typical phrygana habitat. The insert is a closeup of a single inflorescence.

Orchids of Crete and Attica

GREECE, A SMALL country on the southeast end of Europe, is well known for its spring flora, especially to orchid lovers, as it harbors about 227 species of orchids, of which 74 are endemic. Granted, for the general public that flocks to Greece and its islands for the wonderful beaches, orchids may not be the first thing that comes to mind, but the devotion these plants (especially the genus Ophrys) seem to inspire, in both botanical and hobbyist circles, is worth a closer look. Our trip was organized by the Orchid Conservation Alliance (OCA), a nonprofit conservation organization that regularly takes members on orchid-related trips.

We concentrated on western Crete, beginning our odyssey at Chania, and later moving our base to the seaside village of Plakias, with a few days at the end of the trip on the mainland to see some archaeological sites and more orchids! Crete is a microcosm in itself, being a large and self-sufficient island on the southernmost part of Greece. The landscape is dominated by the snowcapped White Mountains, visible from the city of Chania. Bound by the Aegean Sea on its northern shores, and the Libyan Sea on its southern, its flora shows the influences of both east and west, north and south! Fifteen of the 70 or so species of orchids on the island are found nowhere else. That phenomenon is shared by the rest of its flora, with numbers of endemic tulips, crocus, iris, peonies, cyclamen, etc.

With the help of our two guides, Yianis Christofides and Sotiris Alexiou, we visited semiabandoned olive groves on the outskirts of town, high mountain plateaus at Omalos and rugged, rocky slopes and gorges at Spili and Kourteliatiko. All these locations had their own special combinations of species, with species such as Orchis italica, Ophrys bombyliflora and some others common to most sites. Serapias bergonii and Serapias lingua were the first orchids spotted in an olive grove on our first full day, quickly followed by Ophrys scolopax subsp. heldreichii, a beautiful and variable endemic Ophrys species that is showy, with pink, green and brown flowers. We would meet this extraordinary plant again and again throughout the trip.

After lunch, on a short walk across the road in a hilly, rocky site, many more species revealed themselves. There were large populations of the tiny Oph. bombyliflora, the green-andbrown-flowered Ophrys. Like all Ophrys species, it mimics a species of insect, replete with bumps and hairs on its lip. Also seen for the first time on this trip was Ophrys cretica, another endemic, with a striking pattern on its lip. We would meet it again, later on the trip. Spikes of pink or white Orchis italica were also there, their flowers reminiscent of anatomically correct little men arranged in whorls around the stem. The ground was stony and hard with the plants growing in compacted clay soil. Ophrys sicula, a small species with distinctive



yellow flowers with a brown blotch on the lip, was plentiful here, along with a similarly colored but larger-flowered, less-common Ophrys lutea subsp. phryganae. Anacamptis pyramidalis was also here, looking like a compact version of an Orchis italica, with similar colors of pinks and white. Himantoglossum robertianum, a robust plant with large, sturdy spikes of vaguely anthropomorphic flowers in green, brown, white and pink tones, was an occasional inhabitant here all this among mounds of spiny shrubs, Euphorbia sp., Asphodelus sp., thyme, oregano, and many other aromatic plants that scented the air when brushed against. This would become a theme for most of our trip, when we would ramble through the phrygana habitats that are characterized by these plants. Most of the orchids' rosettes of leaves were beginning to dry; clearly dormancy was on the way, when the heat and drought of summer finally comes and they will go completely underground. They will be kept alive by reserves in their tubers waiting for the next winter and spring rains. It is these tubers, whose fanciful resemblance to testicles that gave the orchid family its name.

For the next few days, from our beachfront lodgings on the outskirts of Chania, we took day trips to the surrounding hills and mountains to discover, photograph and learn about these intriguing plants. A new Ophrys species was soon added to our list: Ophrys tenthredinifera, a robust plant with pink, green and brown flowers and a broad lip with a yellow border. More Anacamptis species were seen on these peaks. The trip included Anacamptis papilionacea, with distinctive flowers and the lip broad and flat like a butterfly's wing. Anacamptis collina was another distinctive plant with sturdy, waxy light-pink flowers that stay on the plant long after their prime. Anacamptis laxiflora and Anacamptis boryi, the latter endemic to south Greece, are two more species from this genus, that often grow sympatrically. Anacamptis laxiflora is a tall plant with narrow leaves and folded purple flowers. Anacamptis boryi has similar but flat flowers that bloom from the top of the spike down, unlike most other orchids.

On the high Omalos plateau, we caught the tail end of early spring and











- [1] Ophrys bombyliflora
- [2] Serapias bergonii and Serapias orientalis growing sympatrically. Insert photograph is a close-up of *orientalis*.
- [3] Typical phrygana habitat with several orchid species in bloom.
- [4] Ophrys scolopax subsp. cornuta (endemic to Greece). Insert photograph is a close-up of Ophrys scolopax subsp. heldreichii.
- [5] Ophrys cretica
- [6] *Ophrys lutea* subsp. *melena* and subsp. *phryganae* (inset).
- [7] Anacamptis pyramidalis
- [8] Himantoglossum robertianum

saw Anemone coronaria, Scilla nana and Crocus sieberi among patches of lingering snow. Unfortunately, Tulipa bakeri showed itself with only a few stray plants that were out of reach for most of our camera lenses. The area itself is farmed in a nonintensive way that leaves lots of room for wildflowers and open or wooded spaces for grazing herds of sheep. That evening, a well-deserved seafood dinner in one of the harbor-front restaurants ended another wonderful day.

On the third day, we loaded up the minibuses and drove for a few hours to Plakias, a beautiful town on the southern coast of the island with mountains visible to the north, which we would visit in the next few days. On one of these mountaintops, in a location that we were asked not to disclose, was one of the richest orchid sites that we had seen so far in Crete. No species there was growing in abundance, but the variety was amazing. We walked carefully, so that we did not trample the sometimes-tiny orchids that were everywhere. Among species already familiar to us by now were new ones, including Orchis anthropophora with its narrow spikes of hooded, yellow-brown "man-bearing" flowers, and Ophrys fuciflora subsp. fuciflora, a showy species with pink sepals and an intricate lip adorned with horns and hair! Two more Ophrys species, Ophrys sphegodes subsp. spruneri, and Ophrys omegaifera, added to our list. Ophrys sphegodes subsp. spruneri has a large red-brown velvet lip marked with an "H" in metallic blue! Ophrys omegaifera is an unmistakable species marked with a lowercase omega (W) on its lip. Two species of Orchis grew next to each other: Orchis pauciflora, which is a small plant with relatively large yellow flowers reminiscent of snapdragons, and Orchis quadripunctata, a pink-flowering species distinguished in the field by the four spots on its lip. We found a single plant of the rare natural hybrid between the two species, Orchis ×pseudoanatolica, growing in a cavity on a boulder between its two parents and looking intermediate between the two.

Another spectacular site in this part of Crete is the area of Spili. It is a mountainous plateau with small plots on its lower, flatter areas, on which barley is grown, which is the main ingredient in those wonderful rusks so loved by the







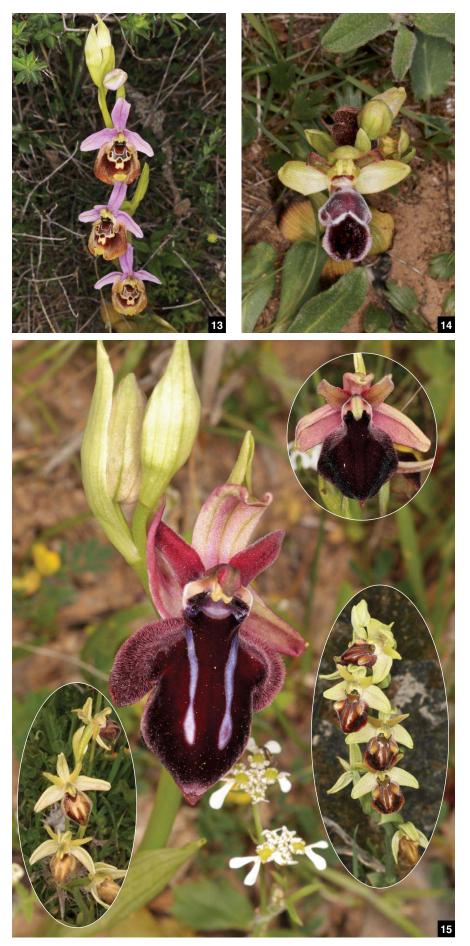


- [9] Anacamptis papilionacea
- [10] Anacamptis collina
- [11] Ophrys tenthredinifera
- [12] Orchis anthropophora
- [13] Ophrys fuciflora subsp. fuciflora
- [14] Ophrys omegaifera
- [15] Ophrys sphegodes subsp. spruneri. Inset photographs clockwise from the upper right: subsp. helenae, subsp. mammosa and subsp. sphegodes.

locals. Tulipa doerfleri, another endemic, grows on the edges of the barley fields, while among the rocks and thorny shrubs in the wild areas, Orchis italica and to a lesser extent Orchis simia, the monkey orchid, form huge colonies visible from the road. We were not alone; this is a well-known spot for wildflower lovers. We met an elderly English couple who have been coming to this spot for 28 years! They knew each orchid population intimately and pointed out to us a rare natural hybrid, Ophrys × sommieri, a hybrid of Oph. bombyliflora and Oph. tenthredinifera, looking intermediate between its two parents.

Getting off the road and wandering among the rocks, many more species came into focus: Neotinea lactea, a small plant with a dense spike of milkywhite flowers spotted with pink; Orchis quadripunctata; Orchis pauciflora; and Orchis sitiaca, another Cretan endemic, being similar to Ant. laxiflora, but with greenish stripes on the petals among other differences. Ophrys species seen included Ophrys sicula, Ophrys fuciflora subsp. fuciflora, Oph. bombyliflora and Ophrys fusca subsp. iricolor, with its green-and-brown flowers, and metallic blue markings on the lip. After a simple lunch in the open and coffee at a seaside cafe, we started to head back to our base at Plakias for a stroll along the waterfront and dinner — a perfect day!

In the next couple of days we visited two quite different areas. The first was a rocky headland overlooking Plakias Bay. The plants here have to withstand the almost constant breeze from the sea, and included Euphorbia paralias; Aristolochia cretica, an endemic Dutchman's pipe; and even Mandragora officinalis, the feared mandrake! In addition to many orchid species we had seen before, two new species of *Ophrys* made their appearance: Ophrys sphegodes subsp. gortynia, which is another green and red-brown flowering Ophrys with two blue lines running the length of the lip, and Ophrys phaedra, similar to Oph. fusca subsp. iricolor, but with more faded colors. Both of these plants are endemic to Crete. The Armeni Minoan cemetery was the other habitat we visited. It is a late Bronze Age archaeological site, with stone-lined shaft tombs cut into the earth and shaded by magnificent old oaks. Orchids here



included large numbers of Serapias lingua, Srps. bergonii, Ophrys scolopax subsp. heldreichii, Oph. bombyliflora, and Orchis italica, among many other wildflowers (Iris sp., Anemone sp., Gladiolus sp., etc). With the merest mention of Knossos, Sotiris, our guide, offered to take us there on our "free" day, despite the two-hour car ride to get there. Knossos (of the Minotaur and Labyrinth fame) is the most important archaeological site in Crete, and one of the most important in the whole of Greece. It was the palatial center for the first European civilization, the Minoan, which was at its peak in the middle to late Bronze Age, ca. 1900-1300 BC. We had a wonderful time wandering among the labyrinth of rooms and terraces and did not once get lost!

The next day we set out to find two rare and endemic plants, Paeonia clusii and Tulipa cretica. The former has large frilly white flowers, the latter tiny pink ones close to the ground. We found both, thanks to yet another English couple, who gave us precise instructions. That night, some of us went up to a nearby mountain village to witness the midnight Easter service and celebration. At midnight, the crowd in the churchyard went wild drowning out the church bells with fireworks, firecrackers and bonfires! The day spent walking through the two gorges of Kotsifou and Kourteliatiko was another highlight of the trip. Many more specialized plants grew in the rock faces, including Petromarula pinnata, an endemic genus within the Campanulacae. A new orchid species was added to our list, Ophrys sphegodes subsp. cretensis, with small, subtly colored flowers of green and brown with a faint "H" on its lip.

As the old saying goes, all good things must come to an end and so did our time in Crete. With a visit to a lakeside habitat, the air fragrant with orange blossoms from nearby groves, we ended our stay in Crete. A short flight later, we were in Athens and on our way to more adventure. Our hotel in Athens was centrally located, and as we met for breakfast the next morning in the rooftop restaurant, we were greeted by a panoramic view of the city. Above the building rooftops and domes of churches, high on its rock, stood the Parthenon!

Sotiris picked us up later that morning for a day exploring the hills



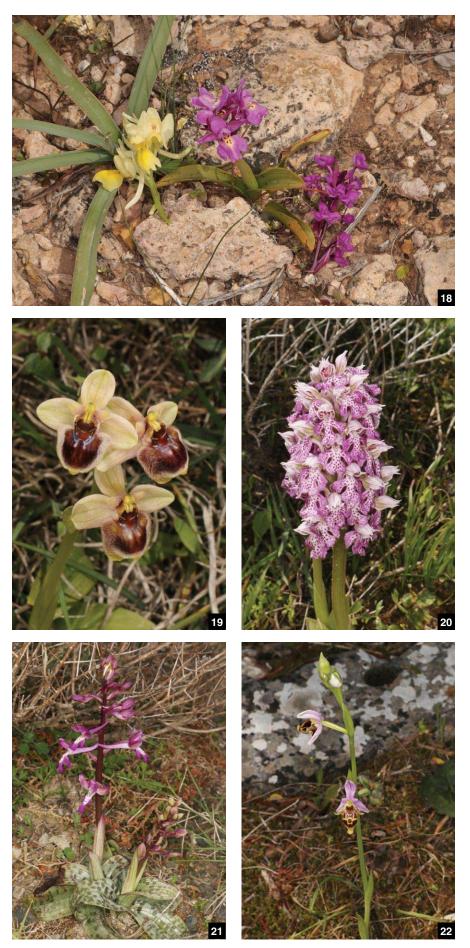


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- [16] Orchis quadripunctata. Inset photograph a rare white form.
- [17] Orchis pauciflora
- [18] Orchis xpseudoanatolica (center) between its parents O. pauciflora (left) and O. quadripunctata (right).
- [19] The natural hybrid Ophrys × sommieri.
- [20] Neotinea lactea
- [21] Orchis sitiaca
- [22] Ophrys oestrifera

around Athens and a little farther up to Mount Hymetus. The city of Athens is surrounded by farms, vineyards and olive groves, and a little farther out, natural areas become more common as the ground is too rocky for farming. Those are the areas we concentrated on with good results. We added several species to our lists, including Ophrys scolopax subsp. cornuta, another endemic to the area. Its small flowers are pretty, with pink sepals and a bulbous, highly patterned lip with the patterning covering only the basal part. Another similar plant is Ophrys oestrifera, which is lighter in color with the patterning covering the lip entirely. The most characteristic and plentiful Ophrys species in the area is Ophrys umbilicata subsp. attica, mostly green and brown with the dorsal sepal arched over the lip like a hood. Ophrys ferrum-equinum, a beautiful Ophrys, was also seen here for the first time; it has dark-pink sepals, and a red-brown velvet lip adorned with an upturned horseshoe-shaped design in metallic blue! Mount Hymetus is a bit wilder and higher in elevation, with tortoises bustling among the fragrant shrubs and more orchids. Among them were by-now-familiar types and more new ones for our list: Ophrys fusca subsp. calocaerina, another endemic to central Greece, similar to Oph. fusca subsp. iricolor, but holding its lip vertically and blooming later; hence the name, which means "of the summer." Anacamptis coriophora, with small fragrant spikes of pink-spotted flowers, was just coming into bloom. This part of Athens would make a wonderful day trip, if you find yourself in the city in springtime with a spare day between flights.

The next day we were on our way to Delphi, ancient home of the oracle of Apollo, northwest of Athens. The ancient site is built on the terraced slopes of a mountain with spectacular views to the sea. It was wonderful seeing the remains of temples, treasuries and a theater among fields of daisies, poppies and other wildflowers. What a relief to see that they do not use herbicides to "clear" the area! We did not find any orchids on the site itself, but just a little out of town we found more new species to add to our list. Among the many species we had already seen, Ophrys ×delphinensis, another endemic to the area, was spotted. It is



thought to be a hybrid of *Ophrys argolica* × *Oph. scolopax* subsp. *cornuta*. The usual combination of pink and brown this time has a "smiley face" marking on the lip. *Ophrys sphegodes* subsp. *helenae*, considered by some authors to be the most beautiful *Ophrys*, is limited to central Greece, and was growing in the same grassy habitat. It has large flowers with yellow-green sepals, and an unmarked, dark-red lip that glows in the sun.

On our last three days, between visits to museums and the Acropolis, we managed to fit in another orchid outing. This time it was tropical orchids, and they were expertly grown on a large, sunny balcony in the middle of the city. My friends Chris and Joanna, whom I have known from the Greek Orchid Society website, grow a varied collection of tropical orchids. Species as diverse Paraphalaenopsis labukensis and as Lepanthes calodyction are among the variety of species expertly grown by Chris. He has devised a system of humidifying the air by circulating water (with an aquarium pump) over trays where the plants grow, thereby compensating for the low summer humidity of Athens. In the winter, he encloses the balcony in plastic sheeting and heats the water (again with an aquarium heater) to keep nighttime temperatures above 50 F (10 C). The results speak for themselves as the plants are well grown and flower regularly.

Overall it was a wonderful trip with memorable plants, places, and most importantly, wonderful people. It was a first for most of us, myself included. Even though I was born in Greece, my family emigrated to the United States when I was young so I did not get an opportunity to experience the flora of this country. Mediterranean orchids are fascinating creatures; and as my friend Sotiris said, "I have been studying and photographing these plants for 20 years, and I am still doing it!"

Acknowledgments

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Alibertis, C. and A. Alibertis. 1989. *The Orchids of Crete*. Published by the authors, Heraklion, Crete. www.flowersofcrete.info. Accessed January 1, 2019.

Petrou, N., M. Petrou, and M. Giannakoulias. 2009. Orchids of Greece. Eight Clouds Publ., Athens, Greece.



- Spiro Kasomenakis has been growing orchids, and has been an AOS member, since the 1980s. His first orchid was Paphiopedilum callosum, and he wishes

Spiro Kasomenakis he still had it in his light

garden. Travel always includes orchids, especially in their native habitats or at least in collections. The allure of these plants is undeniable, and once you commit to entering the "rabbit hole," you may never be the same again (email: kasomenakis@aol.com).



- [23] Ophrys fusca subsp. iricolor. Inset photographs subsp. calocaerina, a Greek endemic (left) and subsp. fusca (right).
- [24] Ophrys umbilicata subsp. attica
- [25] Ophrys ferrum-equinum
- [26] The habitat of Greek native orchids is,



at first glance, appears quite harsh and dry.

- [27] The endemic natural hybrid Ophrys ×delphinensis (argolica × scolopax subsp. cornuta).
- [28] Anacamptis coriophora.