

Flower wasps on Cockscomb

Shannon and Ian Jacobs

Plumed Cockscomb (*Celosia argentea*) grows almost anywhere.



It self-sows and flourishes (as above) in cracks in the footpath.



The plumes have florets with the common pentagonal symmetry of dicots. New florets open each day with a replenished supply of nectar in a ring below the unopened upper plume.

Cockscomb is foraged by large female wasps that are most active in full sun between 10.00 am and 12.30 pm at the end of the wet season (September/October in Thailand). Over one or two days in late October they suddenly vanish, having completed their nesting.

Scoliid wasps

The most common visitor is a Scoliid wasp, *Campsomeris cf. toltecta*. Composite image. Male lower left: female right.



The *Scoliidae* are solitary wasps and not aggressive. Females sting if threatened, but we have not been troubled and don't know anyone who has been stung. Treat them with the respect due to all earth's creatures. Be patient, photograph carefully from 4-5 cm with a phone or macro camera. Pay attention to the wasp not the camera: no trapping. Do not pick them up or disturb their concentration.

A second Scoliid wasp

This one is of similar size: a female, black with a white collar on the thorax. It is a common but less frequent visitor.



Campsomerilla collaris is widely distributed in Thailand. It's often difficult to get close to them but they are more easily photographed on these flowers than on many others. Notice the hairy legs on this and the species above, a typical feature of the Scoliid wasps.

A third Scoliid wasp

This distinctive hairy orange wasp is another Scoliid species that's found here very occasionally. We see it more often in the north.



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Campsomeris cf. trifasciata is widely distributed, (from Taton on the northern Thai border with Myanmar to Singapore), but it appears to be scarce in our local area, having been seen at the house only two or three times over ten years.

Potter wasps

1. The most common local potter wasp, and a frequent visitor to these flowers, is the Indian species *Delta pyriforme pyriforme*.



This colourful wasp is a large handsome species and like the *Scoliidae* is not aggressive.

The female makes a pot in which it deposits a single egg and a larder of paralysed caterpillars and small beetle larvae.



2. A smaller black potter wasp, smaller than *pyriforme* is also frequently seen on these flowers.



In the family *Eumeninae*: *Allorhynchium argentatum* is, along with most of the large wasps found here, also found in Singapore.

Wasps are generally feared and not thought of as being desirable in a house garden but we find none of these species to be in any way alarming and encourage their presence.

3. *Eumeninae: Rhynchium haemorrhoidale* seeking nectar in a newly opened floret.



Black and orange. At 20 mm it could be mistaken perhaps for a small hornet, but it too is relatively harmless like its less scary looking relatives.

We wonder why these wasps prefer Cockscomb to other flowers because they are visited less often by bees and hover flies. When bees do visit they land and leave almost at once. It may have something to do with accessibility and the reliable daily supply of nectar.

If you want to study insects on Cockscomb yourself note that a large stand of flowers will attract more insects than two small plants.

A less frequent visitor

Over weeks of taking photographs every day for this article we found another wasp that was new to us.

A sand wasp

Crabronidae: Bembicinae, Bembix sp. is a black and yellow wasp found in Thailand.



Sand wasps are solitary. They dig holes in sand, lay eggs and feed the larva with paralysed flies and other insects. We have not seen this one before and believe that it may be scarce locally. It should not be mistaken for a yellow jacket or a hornet.

APPENDIX

Our fellow creatures are not always as we might imagine. Elephants are self-aware, and we repeat stories about apparent personal awareness in higher primates and dogs, but we don't normally do that with fish, insects or computers.

Wasps are not self-aware like elephants and people but they do act with purpose. Our wasps went about their business, paying no attention to us. We became comfortable in their space and imagined ourselves to be like friends at dinner, enjoying company, but each one on their phone.

I was surprised in late October to find our reliable "friends" not there and asked where they might have gone: to be gently told they had died: their job was done. It was time. Suddenly overcome by sadness and a sense of loss that bordered grief my eyes filled with tears. How could that be fair in a world that I loved?

In early May of this year a lone visitor appeared on new flowers.



Campsomeris cf. toltecta (male): smaller and less showy than the females we expect to follow.

By month's end there is a female: on the flowers and in short close circling aerial dances with a male.



A week into June we have more females and two potter wasps. A female: *Delta pyriforme pyriforme*, and a single smaller black wasp: *Allorhynchium argentatum*. We wonder if that might be a male.



These wasps cannot be distinguished in any way from their ancestors. They are not self-aware, do not name each other and don't form personal bonds. *My wasps are back* but memory of loss lingers: the price I pay for imagination and self-awareness.

There is another way in which it is tempting to misrepresent the behaviour of solitary wasps. At the height of the season there may be 20-30 wasps of several species present at one time. They mill around visiting florets for 5-10 seconds at a time and appear to a casual observer to be in convivial company, but not so.

Bees and mango weevils feed together.



Bees on the left (*Apis florea*) gathering nectar and pollen in a water lily. Mango weevils (*Deporaus marginatus*) grazing a leaf together from the bottom up on the second day.

Scoliid and potter wasps do not congregate to feed. If one accidentally joins another on a hand of plumes the resident immediately leaves and settles on a vacant hand nearby. They are focussed on feeding on their own and avoid close company. The third image in this article, which shows a male and female for comparison, is a composite of two images.