



Moonflower

Opening
at night

Ipomoea alba

The same evening we photographed the side of the opening flower with a Nikon D810, and the front of the same flower with a Canon EOS 1DX Mark II. We were using our Nikon D5 for a nearby flower the same evening..

In the present PDF we show the sequence as seen from the side. There is a separate FLAAR Reports for the front. And a third PDF shows both front and side views together.

The reason for having three separate PDFs is so students and botanists can have everything on their computer monitor all at the same time.

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5:58:20 PM



6:00:09 PM



6:01:14 PM



6:07:02 PM



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During these 43 minutes the bud swells a bit; the edges of the petals become slightly more noticeable. The petals are wrapped around the outside of the bud in a tight diagonal manner.

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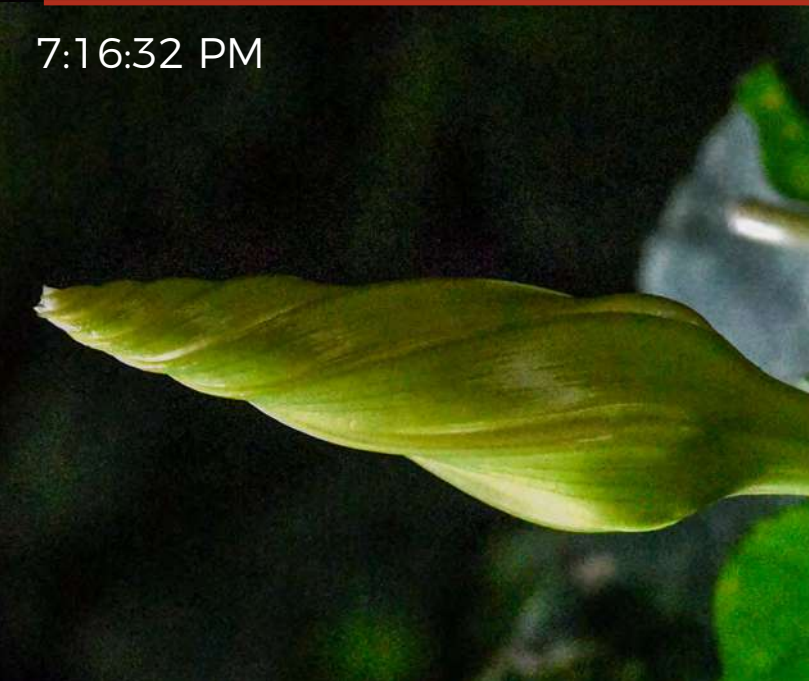
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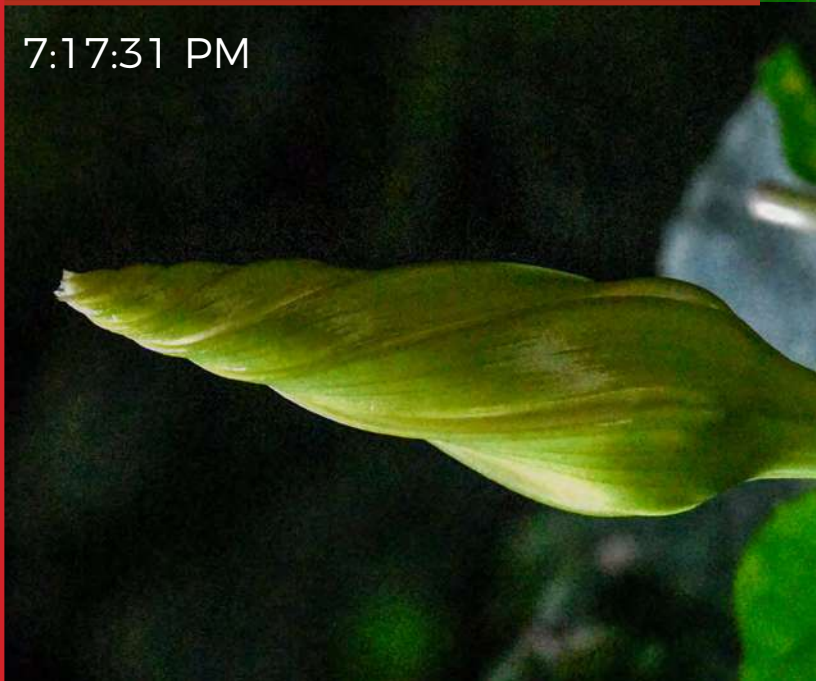
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The tip has been open for several minutes.

During these 38 minutes shown on this page, the side pattern of a swirl is a tad more raised and thus more noticeable.

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Although the outside appearance does not “move fast” during these 25 minutes, in fact the bud is unfurling millimeter by millimeter.

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Tip of the flower has been open (a few millimeters) for many minutes and petals continue to "flex their muscle."

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The electronic cable releases of both Nikon and Canon are junk. They work only a few months and then can't take the position of bending near where they are attached. It is a shame such otherwise good brand names, Nikon and Canon, can't make a cable release that can hold up to use.

Because the cable release would not fire, and because of all the ladders and light stands, the camera operator could not move to use her finger to take the photos. So we missed several crucial minutes of photography.

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It explodes open so fast that even burst-speed can't capture the sequence.

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But it stalls once it gets this far open.

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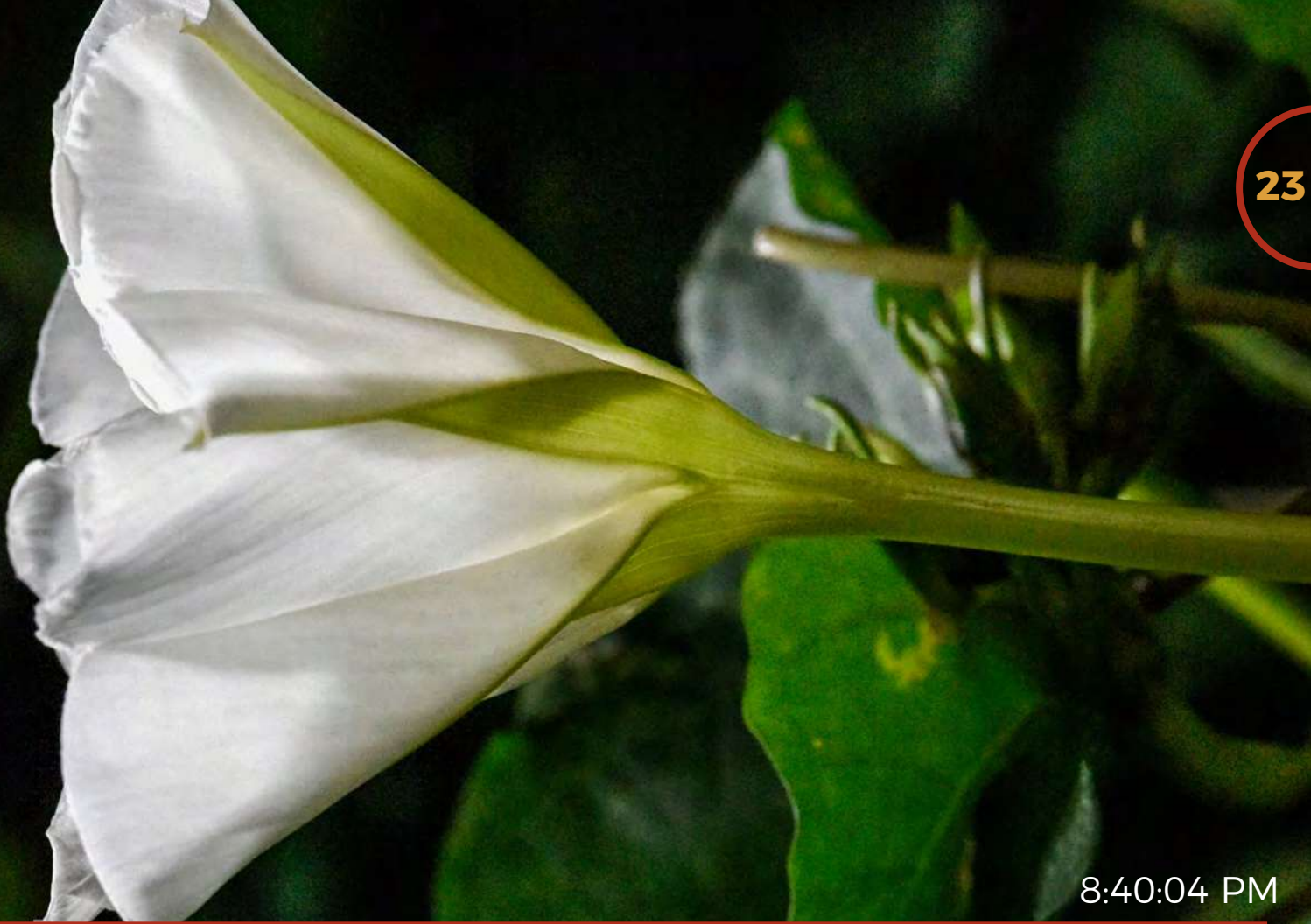
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Petal falls (separates from the adjacent one even more).

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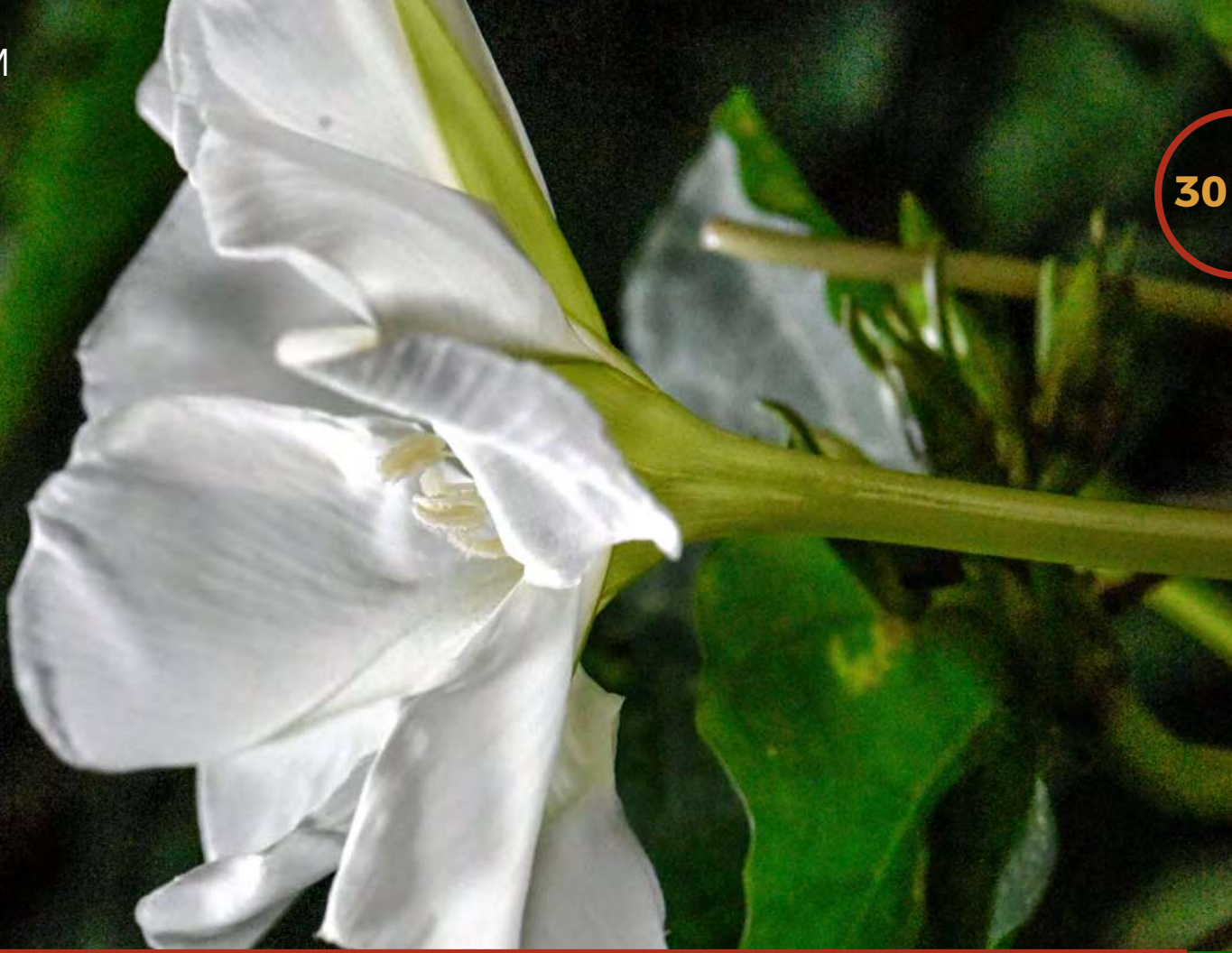


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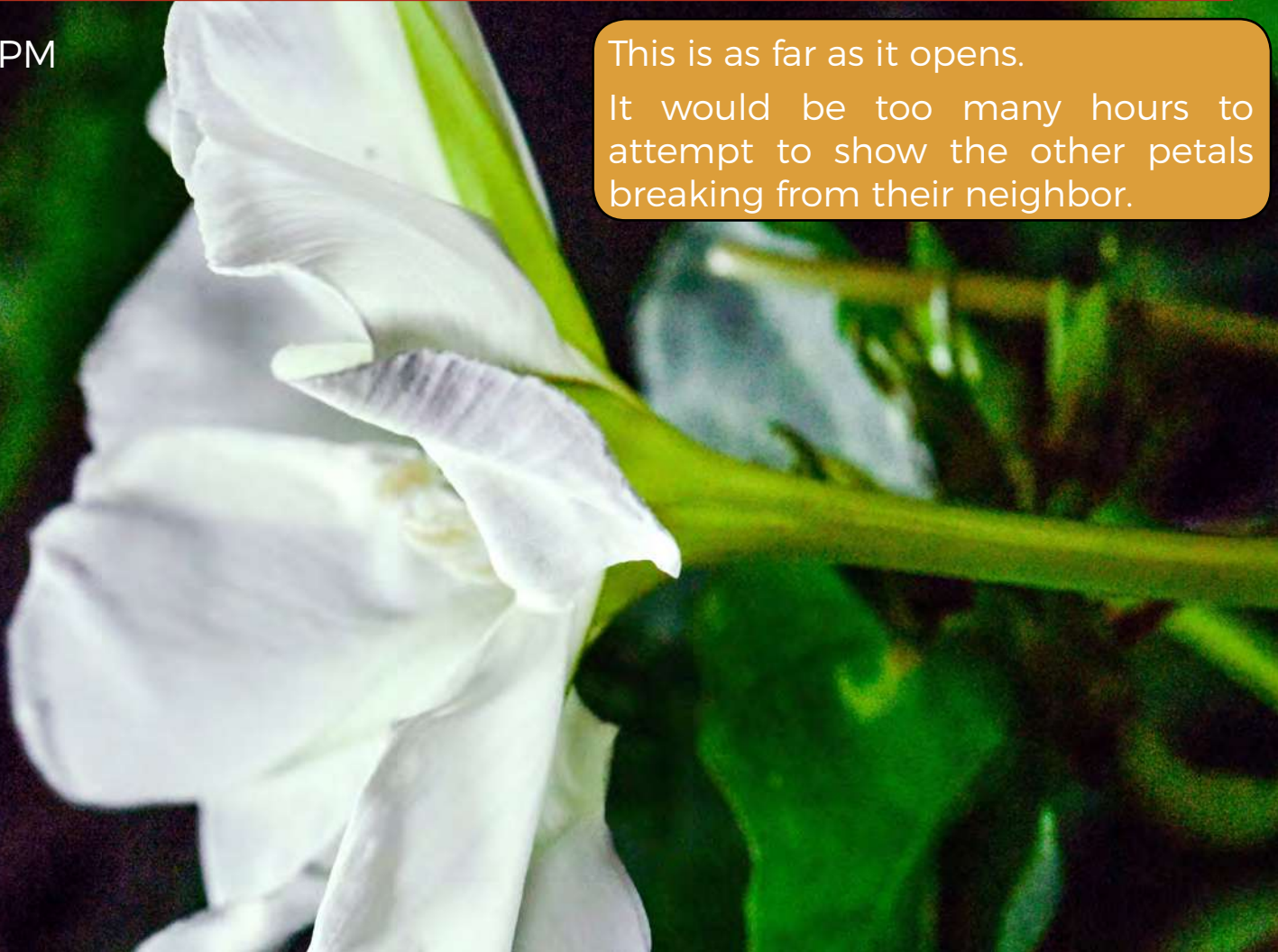
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9:30:34 PM



This is as far as it opens.
It would be too many hours to
attempt to show the other petals
breaking from their neighbor.

SUMMARY VIEWS



The camera used for these side views was a Nikon D810. We were using a Nikon D5 one meter away to photograph another flower, so the front view was photographed with a Canon EOS.

Lens was a 100mm Zeiss f/2.0 set at f9. ISO 10,000 (which is rather high for a Nikon D810 to handle, but frankly the results look fine, keeping in mind that in a PDF the resolution is moderate (otherwise the file is too large to send as an attachment)).

Speed is 1/320, since the flower tip is moving in the final minutes and the flower petals are moving in the final seconds.

There will be a separate FLAAR Report on our photography of the front of the same flower.

There will then be a third PDF showing front views and profile views together.

Since this is the rainy season in the mountains of Guatemala, we were not able to photograph flowers on other nights (since in the rainy season here most of the rain is in the evening and during the night).

We hope you enjoy seeing our work at providing for you this nice sequence of flowers.

We hope our photos inspire botanists and students to want to study this flower's opening sequence in the future.

The front view (in the next PDF) was taken with a Canon EOS-1D X Mark II, Lens: Canon EF100mm f/2.8 Macro USM, set at f/10.0, ISO 16,000, Speed 1/400. Great camera, nice lenses; but the burst speed (even with the over-touted CFast memory card) is hopeless. The Nikon D5 runs circles around the Canon EOS 1DX Mark II in this respect (burst speed shooting).

PHOTOGRAPHY TEAM: Pedro, Gaby, Senaida, Josefina, Rosa and Nicholas.



www.maya-ethnobotany.org



www.maya-ethnozoology.org



www.digital-photography.org