

How to Hand Pollinate Desert Roses

As the bees and the wind rarely do their job pollinating desert roses, growers hand pollinate their own species. This creative art has led to many new, beautiful hybrids of adenium. You can do it too. Together let's see how.

But first, as a little note:

Cross-Pollinating Is Not GMO

When we're pollinating between different adenium species, it is not gene modifying. It is simply a mom from Asia & a dad from America getting together.

Gene modification, as you may already know, is when they extract a piece of gene from one specie & insert it into another... to create a Frankenstein. This is to make the new GMO stronger or more productive, with of course unforeseeable risks.

This is to say, it is totally safe doing pollination on your own at home or in your garden. The best thing of all is you get to name your new specie however you like.

Pollinating Guide: 7 Easy Steps (With Pictures)

This guide is put together by [Dorset Horn Adenium](#). We think it's just so amazing that we need to share it with you. They put a lot of work into this & should get all the credit.

There are 7 steps from picking fresh flowers to getting the pollen in. We will see another method a little later. Let's now begin with step 1.

Step 1: Pick a New Fresh Flower

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/pick-fresh-desert-rose-flower.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/pick-fresh-desert-rose-flower.jpg)

The fresher the flower, the higher the chance of fertilization. Some folks even share that a flower of 1 or 2 days old is best for pollinating.

Flowers that have just bloomed for several hours may not be totally viable. Do let the pollen mature a bit inside before picking them.

Step 2: Open the Flower

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/tear-desert-rose-flower.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/tear-desert-rose-flower.jpg)

They have done a very neat cutting job here, but you can tear the flower however you like. After tearing it up, you will see some hairy pink stripes & a white cone inside.

After that, we can:

Step 3: Remove the Anther Cone

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/remove-adenium-anther-cone.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/remove-adenium-anther-cone.jpg)

Now, we remove one piece of the cone by tearing down the pink, hairy stripes. You will then see the pollen & stigma inside the flower.

Here you can see:

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/stigma-pollen-of-adenium-flower.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/stigma-pollen-of-adenium-flower.jpg)

The pollen is that little white grain. It's quite soft—like some tiny pieces of potato. Below that you can see the stigma. And right below the stigma is the receptive surface. This is the place where we will be transferring our little pollen to.

Note though that not all flowers will have pollen. You may see some with the pollen inside and some may be empty. The pollen can also vary in size.

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/adenium-flower-with-without-pollen.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/adenium-flower-with-without-pollen.jpg)

Step 4: Collect the Pollen

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/collect-adenium-pollen.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/collect-adenium-pollen.jpg)

Use a wet-tip toothpick to lift the pollen up & collect it. This is the trickiest part because it's very tiny to see. Here is the pollen:

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/adenium-desert-rose-pollen.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/adenium-desert-rose-pollen.jpg)

When you've collected a good amount of pollen, it's time for the step we've been waiting for:

Step 5: Pollinating

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/pollinate-adenium-flowers.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/pollinate-adenium-flowers.jpg)

On the receptive surface, you can swirl your toothpick around to make sure the pollen gets spread around fully. This helps higher the chance of successful pollination.

After this, all you need to do is to close the flower up with some tape or rubber band. Make sure no rain, snow or sun can get inside. Place the plants in a shady area. And we can now begin the waiting game.

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/close-](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/close-)

[adenium-flower-toothpick-rubber-band.jpg](#)

You've just seen the pollination within the same specie. If you like to do a cross-pollination, instead of dropping the pollen inside the same flower, you can just take that pollen to a flower of another specie. The process is pretty much the same.

What to Do After Pollination?

After pollinating, you just need to close the flower & protect it from rain, sun, or snow. You could place the adenium in your porch/patio or somewhere with shade. There's no need to water it at this point.

If the pollination is successful, the flower will slowly droop and fall off within 4-5 days. When the flowers start to droop, you can take the plant out & start watering it again. You will see a tiny fruit (seed pod) like a little chili pepper forming within 7-10 days.

When Can I Harvest The Seeds?

After about 60 days til the seed pods ripen, you can harvest the adenium seeds. When the pods are about to age, tie them with a rubber band so they won't crack open and the seeds inside won't get carried away with the wind.

With this knowledge in mind, how about we check out another way to pollinate adenium, even without having your eyes open:

The Paint Brush Pollinating Method

The above method works well for folks with very good eyesight. But for people with bad eyesight & shaky hands, there is another easier pollinating method. You can, sometimes, do this with your eyes closed.

You'll need:

- A paint brush
- Some water
- Desert roses

What you do here is dip the paint brush in some water. After that, slide the brush inside the tube of a newly bloomed desert rose. Then, you swirl around & around like that Starry Night painting by Van Gogh (oh we are so irrelevant, please excuse us for a moment).

After swirling, take the brush out & repeat the same process on another flower. Using this method, you also need to close the flower. It can be done on the same or different species.

Here, you don't need to see where the pollen is to collect it. You don't need to tear the petals either. This is a randomness & probability in action. Some of the pollen will get on the brush & help pollinate the flower.

Here is a clear & easy-to-understand video on pollinating adenium if you would like a look:

>> Link YouTube:

<https://www.youtube.com/watch?v=XglyxErk5y0> [Hand Pollinating Adenium (Waterfalls)]

After some swirling, close the flower up with tape. We can then exercise some patience to see which ones will eventually bear fruits. Also pick fresh flowers for better results.

Choosing Adenium Mama & Papa

Some adenium mama don't match well with other adenium papa. Matching is possible to do, but from growers' experience the seed pod creation rate is low or the F1 generation is unstable.

Here are some adenium species:

Adenium species	Characteristics
Obesum	Average caudex
Arabicum	Big caudex
Swazicum	Uniform pink flower
Crispum	Star-shaped flower

As far as matching goes, the Arabicum doesn't seem to like pairing up with Obesum very much. It's challenging to get it fertilized & produce seeds. Dr. Mark Dimmitt, a master adenium breeder, has had very little success with this cross. He did get one successful breed out of many failed attempts.

For this reason, Arabicum is usually used in line breeding (not hybridizing) to create dwarf or semi-dwarf types that bloom heavily. After the pollination, the hybrid offspring gets the specie name/classification of the mother specie. Well, because moms always get to name the child.

Let's see some matches & their love/hate relationship:

Adenium match	Success rate
Arabicum x Obesum	Not very good
Obesum x Obesum	OK
Obesum x Swazicum	OK
Obesum x Crispum	OK
Arabicum x Crispum	OK
Arabicum x Obesum x Crispum	Doable

The cross between Obesum (Red Everbloomer) x Swazicum (Boyce Thompson) creates this stunning red Crimson Star:

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/crimson-star-adenium.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/crimson-star-adenium.jpg)

Mark talks more about the pollination successes & failures here:

>> Link YouTube:

<https://www.youtube.com/watch?v=FCvAwEFhJKk> (Mark Dimmitt "Adenium: Development of a New Ornamental Plant" CSSA 2017)

What Will the Offspring Look Like?

This is an interesting & always exciting mystery like the black hole of the universe. If the plants are pure genes, then:

- F1 generation will look like one of the dominant parents

When F1 is self-pollinated, then F2 generation will have:

- 3/4 look like dominant parent
- 1/4 look like recessive parent

For example, when crossing dark red x pink, we will get:

- F1: either all dark red (dominant) or pink (recessive)
- F2: 3/4 dark red & 1/4 pink

You will get more interesting combinations in practice with different characteristics like strong/weak caudex, stem strength, different blooming time, cold tolerance, etc.

Here is one more example:

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/mr-ko-adenium-pollination-seeds-example.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/mr-ko-adenium-pollination-seeds-example.jpg)

Above are two yellow flowers of KO_ebay 77 with bright color and KO_ebay 107 with round petals.

When we use KO_ebay 77 as the father (bright color) and KO_ebay 107 as the mother (round petal), what we would like the result offspring to be is it has a bright yellow color like the father and the round petals like the mother.

In other cases, breeders also use red flowers for pollinating:

The pure red adenium variety has very good stability. Which means it can retain its characteristics well when crossing with other varieties of different colors/styles.

So for example if you would like to breed round, bigger flowers from a pink star-shaped flower variety, you could use the round big red as the father pollen. The offspring could have big round flowers and could still inherit some characteristics from the mother pink-star.

It's a great adventure to step foot in. Hopefully this has been helpful. Have fun with your creations & enjoy.

Touring Some Adenium Hybrids

1. Thai Soco (the baby of Arabicum x Golden Crown)

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/thai-soco-adenium-bigger-seedlings.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/thai-soco-adenium-bigger-seedlings.jpg)

Thai Socotranum (short name Thai Soco) is an adenium hybrid born to overcome a disadvantage of the Arabicum specie. That is, the hairy leaves.

These hairy leaves attract spores and red spider mites, which growers may not want especially if there's lots of them in the garden. Thai Soco has the nice large caudex like the Arabicum but without the hairy leaves.

It also grows at a manageable pace over the years for indoor houseplants or bonsai lovers. Oh did we say manageable?

This is the kind of thing we mean:

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/adenium-thai-soco-million-baht.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/adenium-thai-soco-million-baht.jpg)

You could really get it this big if you let it to. Otherwise, it works for backyard growers and won't give you back pain. Their flowers are also very beautiful.

2. MK-MK

[https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20\(20\)/mkmk-adenium.jpg](https://files.zenyrgarden.com/Images/Adenium%20Desert%20Rose%20Blog/Post%20(20)/mkmk-adenium.jpg)

MK-MK, or Muangkong Murakot, is one of the rarest, highly sought after adenium because of its compact bonsai-looking shape. Like the Thai Soco, MK-MK develops really fast. It is also a specie bred by the Thai adenium growers.

MK-MK focuses on growing its roots and caudex and not so much on its branches. Which is a reason why its caudex and roots get very fat but its branches stay short.

Even if you prune back the branches, this fat-short guy won't grow them back too high and tall. This is another reason bonsai lovers love it—because it keeps its overall umbrella round shape well.

The MK-MK doesn't produce spectacular flowers like some other species. It is the normal pink flowers you usually see. It is also a member of the Adenium Arabicum family. But this variety is great for those who love to shape the roots of adenium.

Check out also:

- Adenium Godji (Golden Tank x MKMK)

Credits:

- [Hoa Tri An](#)

- [Hong Quan - Su Canh Binh Duong](#)
- [Thuan vlog](#)
- [Hoa Su Giau Mai](#)