

Botanical Art Online | Botanical Illustration

Study Page Exercise



Create a study Page

In this penultimate part of the course you will create a study page using the previous guidance. By now you should have decided on the subject, which will also be your final botanical illustration. You can begin as soon as you have received approval for your subject choice and read this document.

How you represent your plant on your study page is entirely up to you but here are some further guidelines which might help (step 1 to 3 below). It's important to be able to develop skills in deciding what is and is not important for each plant and this document also provides an example at the end.

I have chosen a Freesia as my example piece and will guide you through the process of creating a study page. Here is a summary of the process followed by a step by step guide:

Step 1. Observe, Measure and Take Notes

- **Observe** the subject as a **whole** and in **detail**. Look at the basic shapes and relationships between parts. **Make notes of your findings**. Use a magnifying glass for small parts.... If it's a flower, take it apart to look inside. Check for details such as hairs, guide marks and other small details.
- **Research** the subject. You should always know the basics, such as which **plant family** the subject belong to and where it comes from **geographically**. This will improve your knowledge of relationships found between species in plants families.
- **Identify key features/ characteristics** - Count, petals, bracts and leaves etc. **Identify all of the important information for inclusion** in your study page, such as leaf type, shape, widest part and leaf attachment. Flower shape and reproductive arrangement etc. Use a reference book to help you to, such as the Cambridge Illustrated Glossary of Botanical Terms. Don't worry if you don't know the botanical terminology, the important part is to understand the architecture of the plant. See the check list below for ideas what to look for.
- Take **photographs**: If possible layout plant parts photograph collectively and as separately parts. Photograph in natural light not under lamps as this gives artificial colour.
- **Decide which parts of the plant you are going to include**.

Checklist - plant parts for possible inclusion

Note: this is a non- exhaustive list and you only need to include what you feel is relevant:

- Flower, front facing, side, rear view and in bud
- Reproductive parts – flower as a dissection and / or as individual parts e.g. stigma and stamen removed and drawn separately.
- If available add, seed pods, fruits, individual seeds etc. – you can add these later when they are mature if possible.
- Stem e.g. Is it round, flattened or perhaps it twists, is it wider or narrower at particular points
- Leaf, front and back views, observes details in new leaf buds, are the basal leaves different. Pay attention to leaf margin, leaf tip, venation and attachment, hairs etc.
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- Leaf arrangement on stem, e.g. are they opposite, alternate or whorled etc.
- Leaf attachment, is there a petiole?
- Underground parts, such as bulbs, corms, tubers or roots if recognised as important
- Remember always measure individual plant parts in mm preferably.
- If you are you going to scale any parts, work out the scale

Step 2. Draw

- **Use an appropriate size of paper for your study.** A3 is a good size to work at but feel free to use larger paper or 2 sheets for larger subjects; you might need this for plants with lots of parts. For smaller subjects smaller paper. Just use your own judgement.
- **Always measure** all of the **plant parts rather than estimating.** Such as height and width of the flower, length of stem, width of stem and paying particular attention to the widest part of leaves
- **Layout you study page from your studies,** try to keep some space between parts for notes and additions. It's not a final piece so this can be fairly organic
- **Draw** out all of the parts of the plant. Use a fairly hard pencil and keep it light, anything between a 2H and HB will be fine for this job
- **Double check the measurements**
- Make **adjustments** if necessary

Step 3. Make colour studies

Start by **identifying all of the basic hues** in each of the plant parts, e.g. leaf, stem colour, flower, fruit etc. Work out the mixes for these hues making notes of the colours used.

- Thereafter identify **shade and tint** colours and **warm and cool variations** in relation to light
- **Paint the study page,** work out which watercolour techniques you are going to use and the order of washes, make adjustments as you work, for example, you may find that you have to make adjustments to your colour mixes

Use the following example for guidance only. You can now start your study page and once you have completed your study page, please email it to me for feedback along with any questions that you might have about this exercise or the final botanical illustration.

Email to: coursework@botanicalart-online.com

Example Study page, Purple Freesia Cultivar

Step 1. Observe, Measure and Take Notes

I carried out some research on the plant and made some basic observations. These are my actual notes and a fairly typical of entries in my sketchbook. I've added a few explanations in brackets. You don't have to do all of this but I like to get a feel for the plant. The headings marked with an asterisk are essential. I also document the plant in photographs as soon as possible.

Name*: 'Purple Freesia' cultivar unknown. Belongs to the Genus: *Freesia* Family: Iridaceae
The genus was named in honour of Friedrich Heinrich Theodor Freese (1795–1876), German physician.

Origin / Geography: The original species hails from East Africa (Kenya) down to South Africa. Like many South African plants, they were transported around the globe and proved easy to cultivate, thus many South African bulbs and corms were being transported to Europe by the end of the 18th century.

History: Modern Freesias are hybridised cultivars resulting from crosses made in the 19th century between two species *F. refracta* and *F. leichtlinii*. *F. refracta* arrived in 1816 and others followed, Max Leichtlin at the Baden nurseries was a pioneer in hybridisation in the 1860's. But it was not until 1901 when the Van Tubergen firm began breeding them that great success was achieved, by the mid 1950 there were more than 50 varieties (Elliot, 2003).

Botanical features/ observations*:

What: Herbaceous plants.

Leaves are long, narrow and pointed, conduplicate (folded, they sheathe the stem but are not joined) they shoot from the base (equitant?), length between 10-30cm. Venation is parallel.

Stems are sparsely branched, length 10-40cm. Flattened to an oval at the lower stem but round at the upper stems.

Flowers are funnel shaped, 6 tepals (when petals and sepals are similar as in tulips), stamens are epipetalous (borne on the petals) and anthers appear basifixed although I need to check this when the anther dehisces (basifixed simply means fixed at the base to the filament). The stigma is long branched at the tip into six and then each division divides again into two, providing 12 receptive surfaces. The ovary is superior. Flowers are in spikes with 8-12 flowers per spike. NOTE: the flowers fade very quickly!

Reproduction type

Sexual, (hermaphrodite) having both male and female reproductive parts in each flower

Asexual, grown from a corm (1-2.5cm diameter)

Note: For information on species you can refer Flora publications for the relevant geographic area. These publications provide excellent information and give detailed botanical information. **Internet searches can also be useful sources of information but cross check for accuracy**

Research and Planning

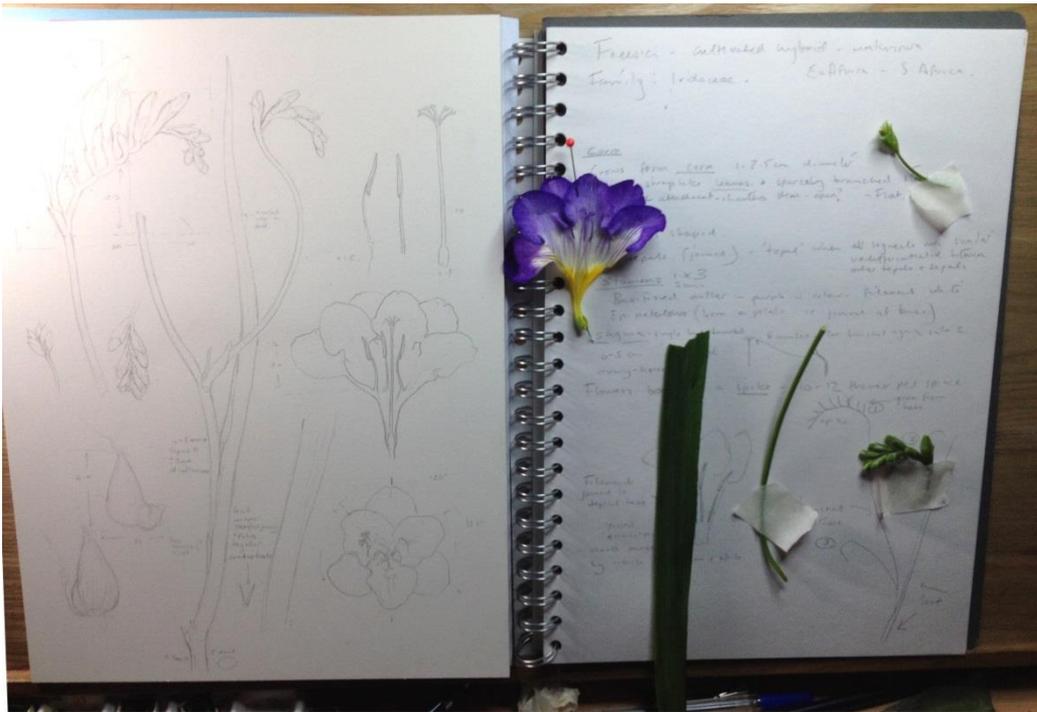


Figure 1. Study Page drawing (left) was completed after researching and making sketchbook notes on the right.

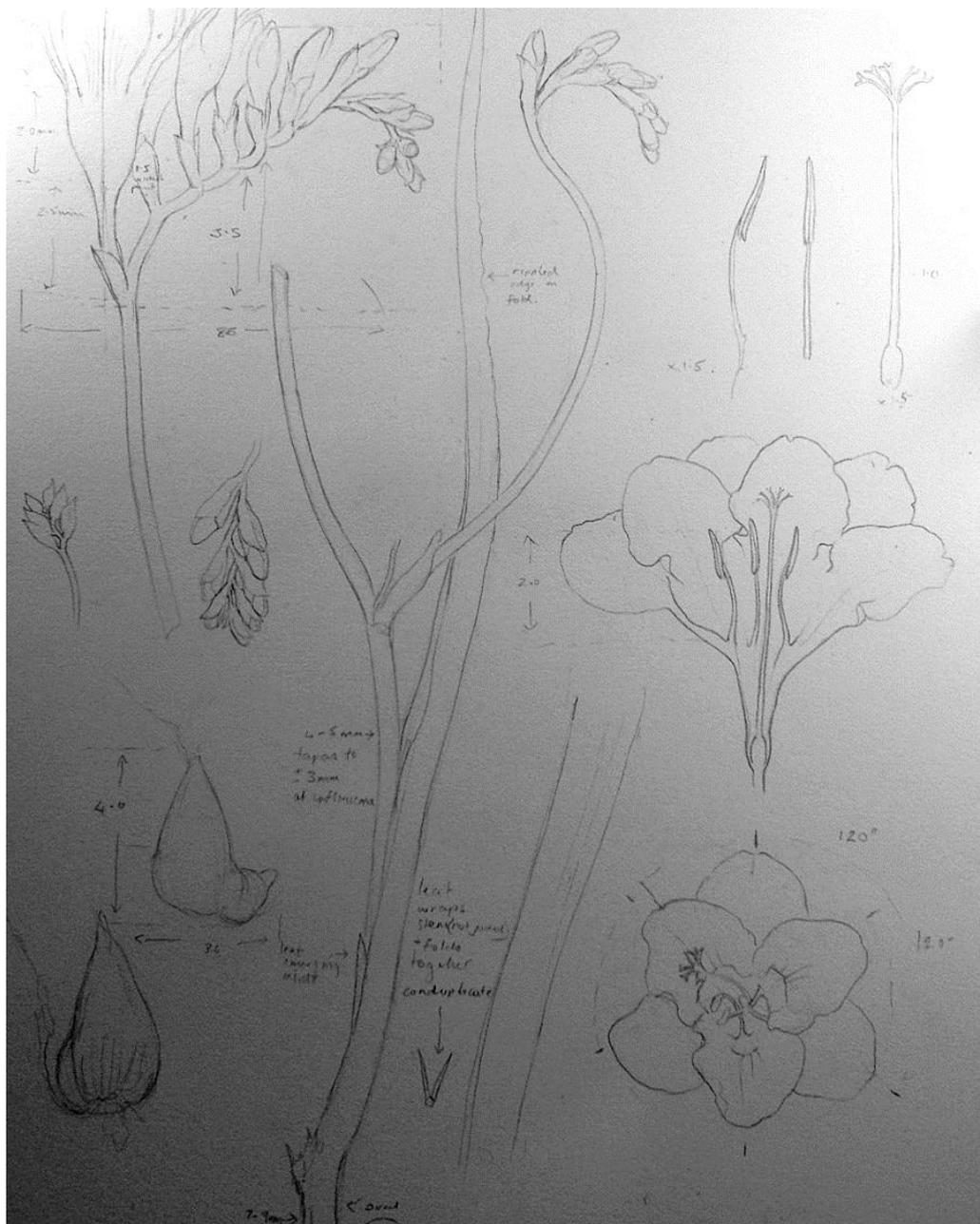
I incorporated information as follows in my sketchbook and used it to decide on what to include

- Side view of flower and flower spike
- Front view of flower
- Bud
- Stems arrangement
- Sexual reproductive parts in dissection and individually at x 1.5,
- Leaf type and arrangement
- Corm
- All parts were measured before drawing and notes made.
- Basic hues, tints and shades were identified and notes made
- Parts were painted and noted made on washes and techniques used

Drawing

Firstly, I quickly plot all parts on the page, I use 9 x 12 " Fabriano Artistico HP 140lb paper. I evenly space the plant parts to fit as much as possible on the page. I usually start with the largest part and work around it. If I want to add any seedpods or other part later I leave gaps. I also leave enough room to add notes and additional small detail.

I begin by drawing the parts most likely to perish or move first. So working on buds and flowers before they open or wilt. I work with many more cuttings than featured in the final study so that I can dissect the parts and have more material than I need. I also want to use stems which are representative of my plant but interesting at the same time in my final piece.



Colour testing and techniques

Once all of the outline drawing is complete I start to work out the colours, again starting with the parts most likely to die or change first. Always keep an eye out for changes in colour. Many plants start to change as soon as they are indoors, for cut stems and potted plants the change in environment can make leaves more yellow or red due to environmental stress such as changes in pH, water, nutrients or temperature.

- Work out all of the basic hues first; remember these are found in the mid tones. Look at the colours in good natural light rather than under artificial lighting. Make notes of all colour used in the mixes.
- Paint small colour swatches for all parts e.g. petal colour, buds leaf and stem colour, fruit or seed colours and any markings etc. you don't have to paint everything just enough to work out the mixes required for the final painting.
- Thereafter work out the shade colours by using complimentary colours or neutral tint.
- Identify the warm and cool colours in relation to light and shade.
- Look at the overall subject, what parts are tonally lighter and darker?
- I paint the initial colours sample s at the side or top of the page. I make changes where necessary nearer to the relevant parts and change - sometimes your choice change slightly as the study work progresses.
- Make notes on the order of the application of washes and the techniques used.
- Make notes on any changes that you make along the way.

Once I have identified the colours I try them out on the study – remember it's a working study not a finished piece. See next page.

