

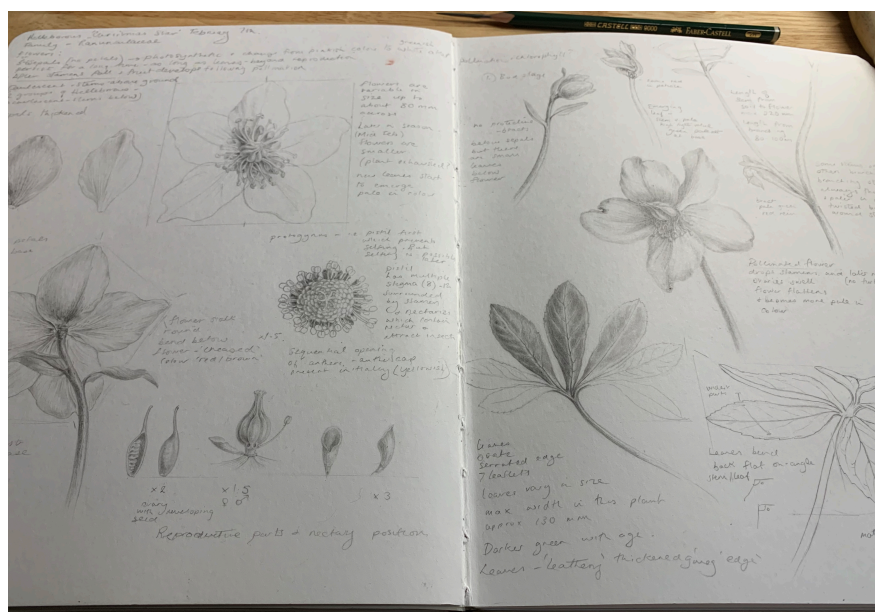
# Dianne Sutherland | Botanical Art Online

## Graphite Part 2

### Selecting a Subject, Researching and Producing a Study Page



Deconstructing a Hellebore to investigate and drawing its component parts for the purpose of creating a study page. Typical study pages below, completed in a large 8 x 10 inch sketchbook

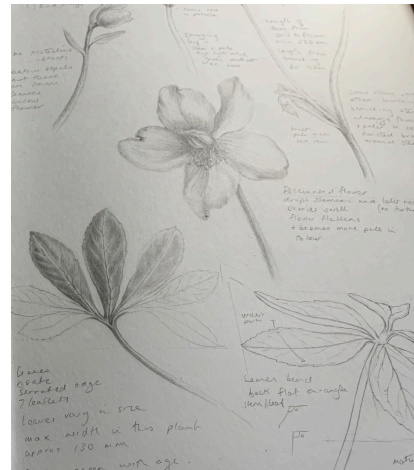


## Introduction

In part one you learned some basic graphite techniques commonly used in botanical drawing. In this second part of the Graphite Module you will build on these techniques to produce a Study Page, as you work towards producing a full tonal illustration of your chosen plant in the final part of the Graphite module.

In this Part of the course you will:

- **Select a subject for your study, this can be a plant of your choice**
- **Research the plant and produce a study page of drawings and research**



### Choosing your Study Plant

**A few things to consider when choosing a plant:** Choosing a subject is not always as straight forward as it might first appear, it's all too easy to be drawn in by attractive blooms and fruit without thinking through the work involved. At this stage, try to pick fairly simple plants to master your graphite technique. Avoid plants with large numbers of leaves as the time required to complete such pieces can be significant and often students become overwhelmed and disheartened by the amount of work involved in creating tonal drawings of more complex plants. Remember that leaves are just as important as any other part of the plant and much of your time will be consumed by them. As your drawing progresses you will find that you can work faster and that the complex forms are easier to approach. Some popular choices include: Orchids, Hellebores and cut flowers. Here are a few things to consider:

**Can you accurately identify the plant** by its correct Latin name and common name, is it a species or cultivar? Painting or drawing an unknown plant, isn't a good idea as you won't be able to find any information about the plant.

There is nothing wrong with a flower drawing or painting but if you want to be a botanical artist you need to get used to doing a bit of research into your subject and it's far better to do this before you start and to correctly identify the plant.

***Remember a botanical drawing should be informative by being an accurate depiction***

***scientifically but should also be aesthetically pleasing to the eye....always keep this in mind***

**Choose a typical specimen** – if you are selecting a cutting from a plant to work from, always look at the whole plant to make sure that you haven't chosen an odd part or mutation. Many plants are prone to little mutations, such as flowers with 4 petals that typically has 5. This isn't a good botanical study unless the mutation is the one feature that you are trying to illustrate! so looking over the plant carefully and making comparisons will ensure you have a typical specimen. Also, observe the plant growth habit. If it's a cutting cross reference with the same plant by researching it online.



**How long will you plant last** – Some plants although very pretty have a limited lifespan once taken indoors, and most start to alter as soon as they are cut. Things to look out for, constant movement towards light, wilting, colour change and flower closure, these changes are due to altered conditions in terms of light, nutrients and temperature. If you work slowly this is something you must consider. Plants such as orchids are pretty accommodating and flower for long periods. Keeping the specimen in the fridge or a cool place when not in use will help to preserve its lifespan. A potted subject can be a good choice.

## Moving on to the Study Page

What is a Study Page and why do you need to create one

The purpose of a study page is as follows:

- A study page is simply a collection of drawings illustrating the component parts of a plant with some written notes about the plant. It is your visual annotated research which deconstructs the plant. The purpose is to ensure that you fully understand your subject before undertaking a full tonal study of it.
- A study page is also where you work out your approach to a final drawing, e. g. tonal technique and grades of pencil. It can contain small sections of finished drawings and line drawings. It doesn't need to be perfect but is a place to work out 'how to draw' your subject.

### Here are some points to consider when creating your study

**Research** Once you have selected your plant, you can start to collate reference material, look in books and online to see what you can find out about your plant. Identify its correct name, its native habitat and any interesting facts, learn about the story of your plant. Make notes and rough sketches initially.

**Take photographs** produce a photographic reference library, black and white photographs are particularly useful for graphite work because they can help you to identify the tonal differences across the plant. Creating reference material in this way is good practice and can be referred to for your final piece. It is advisable to keep photographic reference in a folder on your computer or on an drive.

**Observation** - is the key to success. Count petals, look at leaf arrangements, identify the reproductive parts and ask yourself questions such as, where is the ovary? how many anthers are there? and where is the stigma and style etc. A good reference book is useful, such as the Cambridge Illustrated Glossary of Botanical Terms by Hickey and King.

**Measuring and identifying characteristics** – take measurements of your specimen, identify the basic shapes and characteristics. A few points to consider: Leaf width, length, distance between veins, distance between leaves. Shape of leaf and margin. Width of stem, length of stem and shape (not all stems are round!). The shape and position of flowers.

**Draw**- use a combination of line and tone, and a range of pencil grades to allow you to achieve the correct tonal values. Your tonal strip from Part 1 can be used as reference when identifying tone.

**Positioning** - Understand the key morphological features as well the growth habit. A good understanding of these components will help you to identify the best positioning for your final composition. Look at the lines, curves and shapes – does it make a good clear illustration? Drawings should be made of flowers and leaves from different positions, such as front, side and back. Remember that in the final composition needs to be botanical accurate, balanced and aesthetically pleasing, so creating a good balance between these requirements is important.

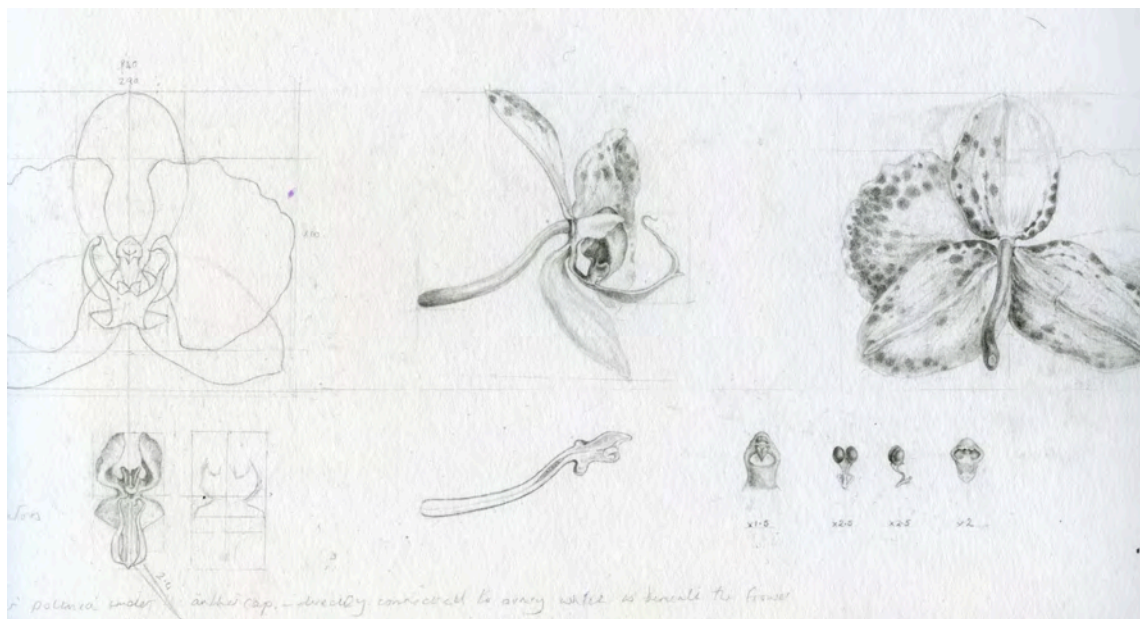


Many botanical artists work from more than one specimen and often the work has to be completed after the flowers have faded so gaining a good understanding of the plant from various aspects will be invaluable.

**Clarity** - Always ensure that definition between parts is clear and that there are no areas of uncertainty. For example, some overlapping of leaves can look confusing if there is insufficient definition in tonal values, ask yourself which parts are lighter or darker. It may be wise to prune a subject to achieve greater clarity but great care must be exercised not to detract from the plants natural growth habit. For a botanical piece try to incorporate different elements in your study pages, such as: foliage, flower open, flower in bud, seeds, leaves, stem as well as dissections. You don't have to include all of these but you need to consider what you need. Make as many drawings as necessary so that you understand your subject.

**Lighting and Tonal Values** Light your subject well, and keep the lighting consistent in all parts drawn when shading.

**Review.** When you have finished your initial studies of the plant, sit back and think about whether you have everything that you would need to produce a finished drawing. Is anything missing?



Measured drawings of a Phalaenopsis Orchid flower and dissections from a study page, a combination of line and tone has been used.



## Now Complete the three Study Page Exercises

### Exercise 1. Select a plant and carry out research

- **Select a suitable study page plant using the guidance in this document.** Email me if you need and advice on your plant choice.
- Undertake research to find out the following. You can use the internet or books to carry out research. Don't spend too much time on this activity but when you have finished you should have written a short paragraph of around 250 - 400 words ,which includes the following, plus any other information of note:
  - The correct Latin name of your chosen subject. Refer to the Appendix at the end of this module 1. Rules for Naming Plants', this document
  - Any common names
  - The plant family your subject belongs to
  - The country of origin
  - Who discovered the plant
  - Any other interesting information, e.g. pollinators or medicinal properties. Check to see if the plant is poisonous, **always take great care handling plant material and find out about its properties before handling**
  - Make some initial rough sketches as line drawings to familiarise yourself with the subject

### Exercise 2. Collate Photographic Reference Material

**Take photographs** from as many angles as possible and try to find the most informative and aesthetically pleasing aspects. Photograph the individual plant components, leaves, stem, flower, reproductive parts and or any other relevant aspects, including a dissection. This is an important part of the process, should anything happen to the subject you will always have the photographs to fall back on for reference and the process will allow you to get to know the plant. You can use a camera or even a good mobile phone, such as an iPhone, will do the job.

If you have sufficient plant material take cuttings. It is useful to photograph the plant and plant parts against a white card background. Light the subject using a lamp with a daylight bulb or work in natural daylight. If you are right handed work with the light source on your left. If left handed, work with the light on the right hand side of the subject. See examples on pages 7

It may be useful to use a retort stand clamp to secure the subject or some florist foam and /or tape, you will need to be creative in positioning your subject for photographs

Try turning some of the images to black and white, this is fairly simple on a smart phone or on image editing software, such as Photoshop.

**Save photographs on your computer or chosen device. Make sure that they are clear and not blurred.**

Here are some examples of typical research photographs, Freesia. A light card background has been used so that the plant can be seen clearly. The lightsource from the upper right hand side, not where the light and shade is.

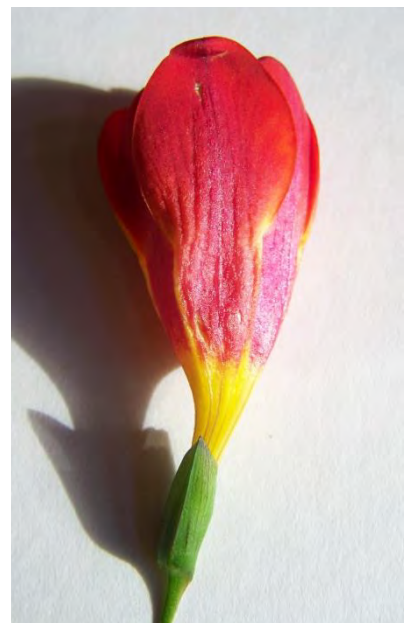


Top: rough idea for composition, showing general growth habit and shape. Bottom left and right shows different aspects of semi-open flower and buds, in this case rear and front facing. Try to take as many photographs showing the different views.



Leaves, shoots, buds and stems





A selection of photographs showing the flower parts. You don't *have* to do a dissection but it will help you to gain a better understanding of your flower and I highly recommend it. Place a ruler next to the dissection for reference and note the measurements of all parts. For small parts, you will be able to scale them up to a more useful size for viewing when drawing.

To dissect the flower use a sharp scalpel or small craft knife to cut straight down the centre of the flower but being careful not to cutting through the stigma/style. The ovary can be cut through though to show the ovules. The flower reproductive parts can then be carefully removed, as shown bottom left. The male part or stamen is shown on the left comprising filament and anther and on the right the female part is the pistil comprising style and stigma. The ovary is superior.

### Exercise 3. Create the Graphite Study Page

From your initial observations, reference material and research, you can now start to develop the study page of drawings. A study page can be quite varied in appearance depending on the plant, include the most important parts, but do not repeat the same parts unnecessarily. Also include handwritten notes and measurements, as these may be useful reference.

**Tip:** You may find it easier to draw the parts on tracing paper first and then arrange on the paper, this will ensure good use of space. See examples over the page.

You may use a combination of line and tone drawing for this exercise depending on the complexity of the subject. I recommend using the continuous tone technique for shading, but you may also use stipple or hatching instead if you wish. Parts can be left unfinished as long as you understand the plant. See examples below of *Fritillaria meleagris* and *Helleborus niger*.

Produce a full page drawing or complete the drawings over several pages, you may use loose paper or a sketchbook for this activity. Use paper that is an appropriate size for your plant.

**Note:** All parts should be life size with the exception of small plants which may be scaled up for ease of viewing, e.g. stamens may need to be illustrated at x2 or more, if you do enlarge any parts, they must have the scale written beneath the part

#### Suggestions for parts to include:

- **Leaf portrait** showing the venation. Make relevant measurements and note where the widest part of the leaf is.
- **Include leaves in perspective**
- **Stem**- include different sections of stem where appropriate e.g. new growth and woody growth
- **Flowers** – Make a number of drawings of the flower showing the different aspects e.g., front view, side view, back view and at an angle.
- **Dissected flower**
- Larger section of plant showing connecting parts, such as a stem with leaf and flower
- **Flower Bud**
- **Fruit** if available.
- **A larger section of the plant including flower, leaf and stem** produced as a line or tonal drawing.
- Bulb, corm, tuber or root if appropriate



Left: using tracing paper to position the parts on the page can make it easier to lay-out a study page. Above: A completed study of *Fritillaria meleagris*, showing numerous aspects of the plant

A alternative approach of completed study page in a sketchbook can be seen on the front cover of this document. Both are acceptable formats for your study page.

## Appendix

### 1. RULES FOR LABELLING PLANTS

#### Binomial classification

The internationally recognised system for identifying plants is the binomial classification system, which is regulated by the International Code of Botanical Nomenclature (ICBN). This is a two name system more commonly referred to as the scientific, Latin or botanical name for a plant. The names are generally derived from Latin and Greek.

The binomial system comprises the genus and the specific epithet ( or species )

1. **Genus** – the name for a group of plants that share certain similarities, when written this name comes first and always starts with a **capital letter**. It is **italicised** e.g. *Ranunculus*

2. **Specific epithet or species**– the individual species is below the level of genus, and comes after the genus name. It is written in **lower case** and in italics e.g. *repens*

Together the two names give us the binomial name *Ranunculus repens*

To be correct you should also add the designated name ( either shortened or an initial) of the person who first described the plant. This comes after after the specific epithet, in this case *Ranunculus repens* L. Where the L stands for Linnaeus, who first described the plant.

- Note: If the binomial name is hand-written it should be underlined for clarity
- The Latin name can tell you a lot about a plant for example *repens* means ‘creeping’ - therefore if you come across this word as a specific epithet you will know that it is a creeping plant. *Ranunculus* means ‘little frog’ and probably refers to the fact that most of the genus are found near water.



## Lower levels of classification, varieties, subspecies and forms

Below the species level there are several more levels of classifications which are used to identify plants. Where a species has infraspecific (below species level) categories this is referred to as the trinomial name. Most commonly used additions to the binomial name is a connecting word indicating **subspecies, variety or form**. These levels denote a slight variation in the species described by botanists.

Used as follows:

- **Sub species** - written **subsp.**
- **varietas** – written **var.**
- **forma** – written **f.**

The subspecies or variety name is **written in italics** and the person that first described the infraspecific character of the plant should be included. *Ranunculus repens* L. has several different varieties which have been described by botanists

### For example:

*Ranunculus repens* L. var. *glabratus* DC.

*Ranunculus repens* L. var. *degeneratus* Schur

## Cultivars

The name cultivar distinguishes wild plants from those that have arisen from cultivation. Cultivars also referred to as cultivar varieties are **selected forms** of plants with **desirable characteristics** which are **bred for these characteristics** and **maintained by propagation**. They are grown for commercial purposes in **horticulture**. Today fruit and vegetables are predominantly cultivars, bred for characteristics such as disease resistance, flavour and yield. Cultivars **do not generally occur in the wild**, however a few exceptions have resulted from natural selection in the wild.

The naming of Cultivars is regulated by the **International Code for Nomenclature for Cultivated Plants (ICNCP)**.

A **cultivar name** consists of a **botanical name followed by a cultivar name** it may have been registered with the International Cultivar Registration Authority (ICRA).

The cultivar name must be written in **single inverted commas** and **not italicised**, names **should always begin with capital letters**.

### Example:

*Solanum tuberosum* 'King Edward'

**Note 1: Modern cultivar names are not in Latin.** However old cultivar names invented before these rules can be Latin. Old common Latin cultivar names such as ‘alba’ for white-flowered varieties.

**Note 2:** If the species is uncertain, it may be omitted, hence this is still correct:

## Hybrids

Hybrids are the result of crossing two or more species and a ‘x’ is used in the name to indicate the cross breeding.

Hybrid names can be written in two ways, for example:

*Meconopsis baileyi* x *M. grandis* is a hybrid of the two Himalayan blue poppy species. It has also been named as if it were a species in its own right as *Meconopsis* x *sheldonii*. Both names are correct.

Hybrids can also have cultivars like true species.

For example, *Populus* x *canadensis* has several cultivars including:

*Populus* x *canadensis* ‘Eugenei’

## Hybrids between Genera

To be added later

## Common or vernacular names

Common names should also be added to your labelling. They are **not in italics** and should be entirely in **lower case unless the common name includes a place name.**

**There are no specific rules but these are the accepted conventions.**