

Norfolk Peas & Vetches ~ a Visual Key

Bob Leaney Nov 2016

The Peas (Lathyrus) and Vetches (Vicia) belong to closely related genera in the family Fabaceae. They are included by Stace (2010) in the Tribe Fabeae, characterised by paripinnate leaves with equal nos of leaflets, the terminal leaflet being replaced by a simple or branched tendril, sometimes reduced to a tiny point. Genera with a terminal leaflet & therefore odd nos of leaflets are termed imparipinnate. Genera which have odd nos of leaflets, but always 3, are termed ternate :-

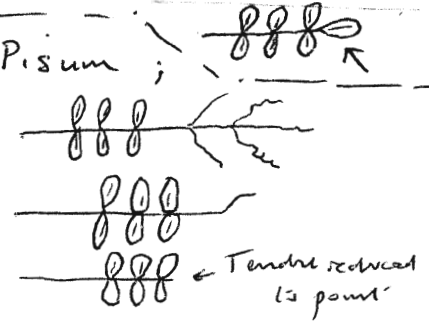


- Ternate leaves: Trifolium; Medicago; Oxonis; Melilotis;
- Imparipinnate leaves: Robinia; Galga; Astragalus; Oxytropis; Stipule like leaflets
- Paripinnate leaves: Vicia; Lens; Lathyrus; Pisum;

(Tribe Fabeae)

Cicer.

Most of the British members of the Tribe Fabeae are crop plants ~ Broad Bean (Vicia faba); Garden Pea (Pisum sativa); Lentil (Lens culinaris); Chick Pea (Cicer arietinum).



However, all these spp do not persist (V. faba), or are only very rare casuals in the wild. Fodder Vetch (Vicia villosa) has been recorded in S. Norfolk & is frequent in the wild around the Home Counties. The large podded form of Vicia sativa (ssp sativa) was once much grown as a fodder plant, but is now rarely encountered ~ oddly the common form of V. sativa (ssp segetalis), which "behaves" as a native, is treated in the New Atlas as an alien ~ it was apparently used as a fodder plant as well in earlier times.

- Characters in Vicia
 - Stems not winged; stipules small, always smaller than leaflets.
 - Always a tendril or point.
 - Flowers & pods small.

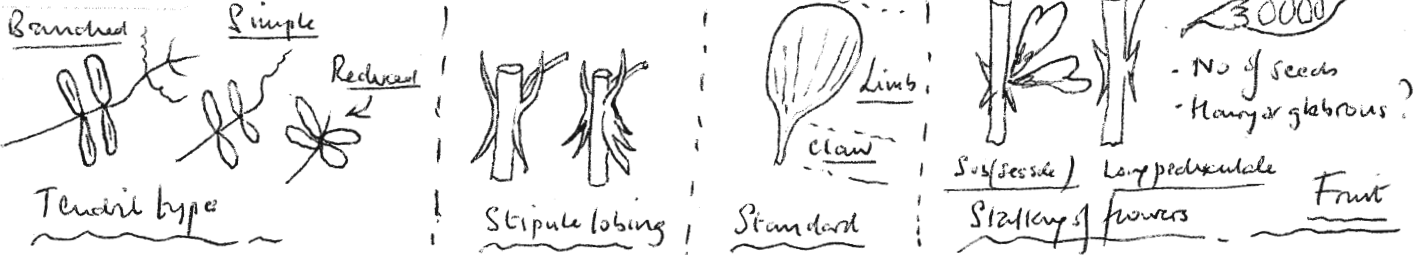
- Characters in Lathyrus
 - Stems usually winged (not L. pratensis).
 - Stipules usually large, often > 1/2 width of stem, or wider.
 - Leaves may be reduced to one grass like blade (L. nissolia) or absent (L. aphaca)

Flowers & pods usually large

- Keys & Illustrations | The visual key deals only with the 15 or so spp encountered regularly in Norfolk, or rare/local natives. Around 11 other spp of rare introductions that have occasionally been found in the country, or other rarities, are dealt with well by the Stace Key (& drawings).

Vicia

Characters used in this key & Slace Key :-



All leaves without tendrils, terminated by small point

Flowers very small < 1 cm
dull purple, fruits very small.

Tiny & creeping

V. lathyroides

2-4 pairs

6-9 mm

Flowers very large ± white with blackish wings

V. faba

1-3 pairs

Pods very large!

At least upper leaves with proper tendrils

Peduncles absent or shorter than flower

Perennial

Vicia sepium

Flowers dull purple
Leaflets obovate retuse tipped
(3) 5-9 pairs

Climbing or sprawling

Flowers 2-6

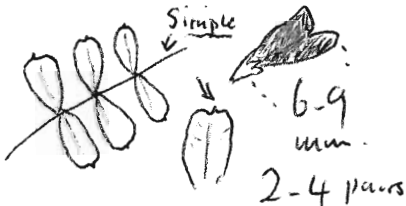
Stipules 3-4 lobed

Annuals

V lathyroides

Tiny & creeping
Flowers dull purple,
very small (6-9 mm)

Leaves obovate-oblancoate



Vicia sativa

Flowers all deep pink-purple, or mixed pink & purple
Keel. Leaves oblanceolate to linear.

3-8 pairs of leaflets

Flowers concolorous or bicolorous
Leaves isophyllous or heterophyllous



Flowers all deep pink purple



Upper

Ssp vesetalis

Flowers all deep purple



Upper

Lower

Yellow brown hairy

Few flowered racemes

Many flowered racemes

Peduncles long, at least longer than flower



Peduncles long, at least as long as flower

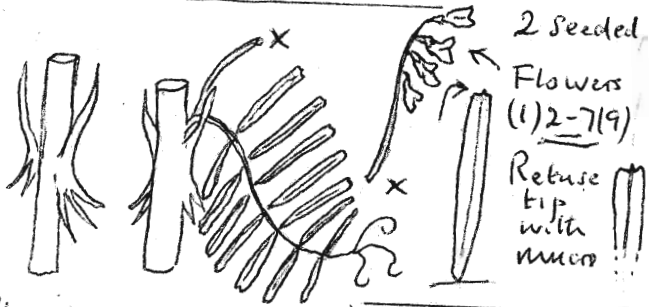
Vicia (cont.)

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Flowers few in raceme (1-8)
and small (2-8 (9) mm)
(annuals)

Flowers many in raceme
(>8) and large (8-20 mm)
(perennials)

- Many flowers & many leaflets
- Flowers off white (tinge of purple)
- 2 seeds, pods hairy



Stipules
3-4 lobed

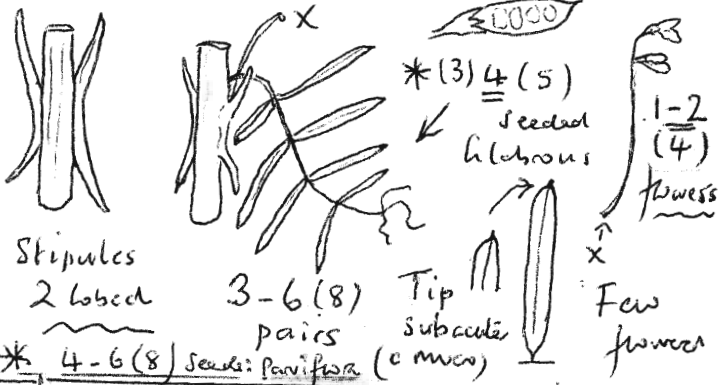
4-10 pairs

V. hirsuta

- Fewer flowers & leaves
- Flowers pale purplish blue

Vicia tetrasperma

- 4 seeds usually, pods glabrous



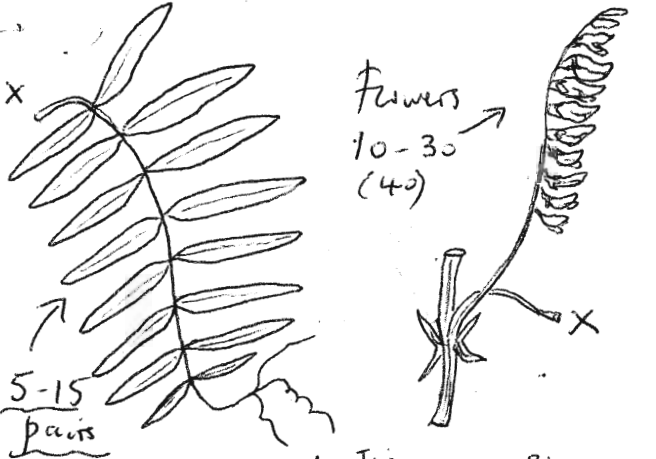
Stipules
2 lobed

3-6 (8) pairs

Tip subacute

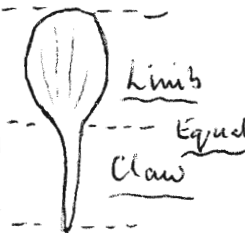
Few flowers

* 4-6 (8) seeds: Parviflora (0 mucos)

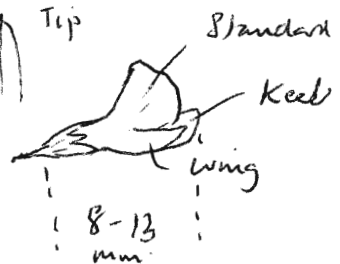


Flowers
10-30
(40)

5-15 pairs



Standard petal

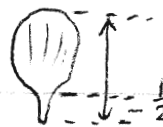


8-13 mm

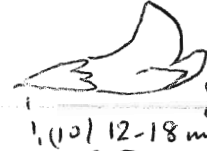
Flowers deep blue-violet

V. cracca

Very similar to V. cracca apart from:



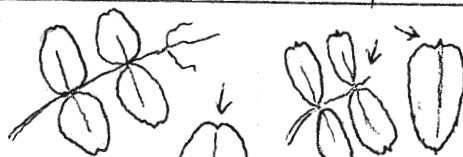
Standard (shorter claw)



Flowers larger
& blue lilac to purple

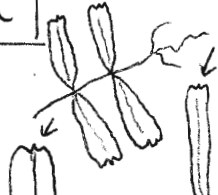
V. tenuifolia

Vegetative identification

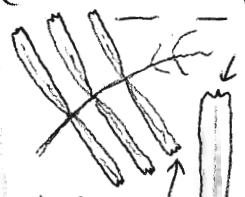


- Obovate
- Retuse tip
- (3) 5-9 pairs

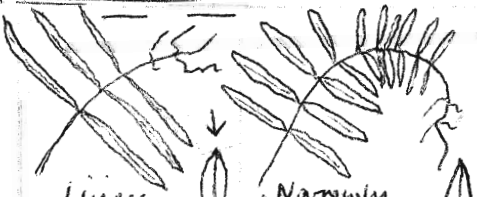
- Narrowly obovate
- Retuse tip (with mucro)
- 2-4 pairs



- Oblanceolate to linear
- Retuse tip & mucro
- 3-8 pairs



- Linear
- Retuse tip & mucro
- 3-4 lobed stipule
- 4-10 pairs



- Narrowly lanceolate
- Subacute tip & mucro
- 2 lobed stipule
- 3-6 (8) pairs
- 5-15 pairs
- >10 = V. cracca

V. sepium

V.athyroides

V. sativa

V. hirsuta

V. tetrasperma

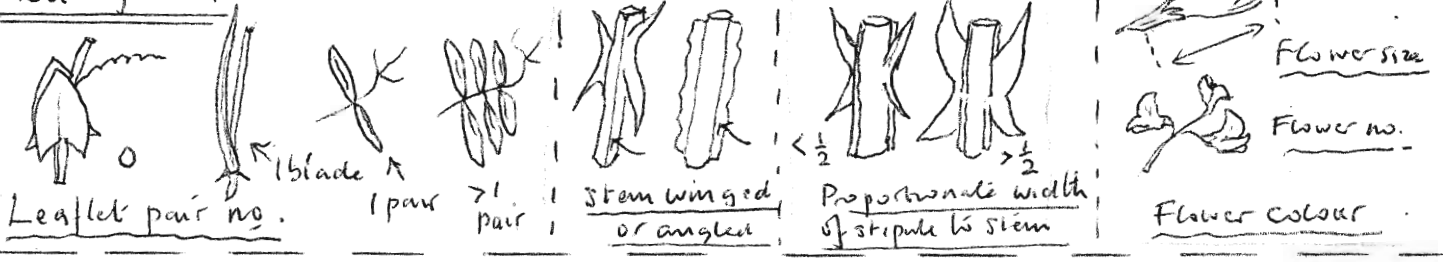
V. cracca

Visual Key for Norfolk Peas & Vetches

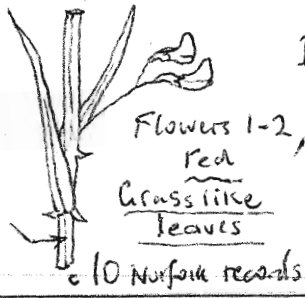
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Lathyrus

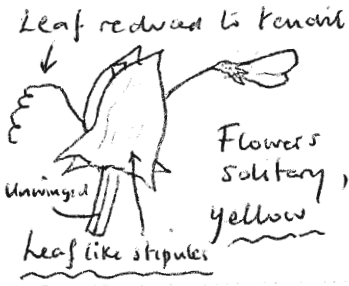
Characters used in this & the Stace key :-



Leaves reduced to single blade or tendril.



Unwinged stem
In grassy places so very difficult to spot! (mainly W)
L. nissolia

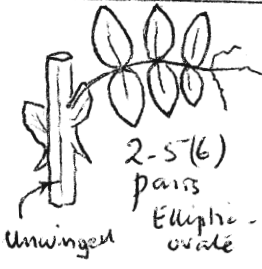


Southern species, probably native
(5 Norfolk records before 1960)
L. aphaca

Leaves with 1 - many pairs of leaflets

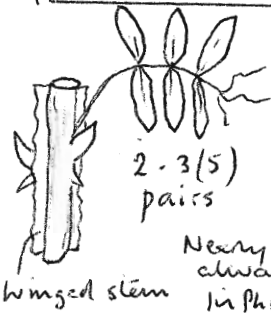
Leaves with > 1 pair of leaflets

Stems not winged



Holkham 1935
Planted
Blakeney 1912 & 1953
Flowers purple to blue, 2-10 (15)
L. japonicus

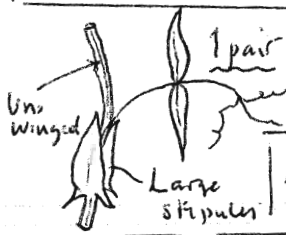
Stems winged



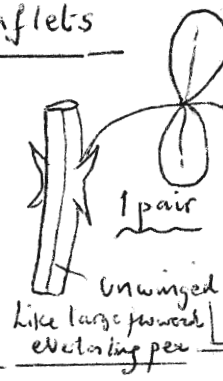
"Shy" flowers easy to miss
Flowers purple blue 2-6 (8)
In fens, Bure, Ant, Thurnham
Hayham sand & Yare valleys
Nearly always in Phragmites
L. palustris

Leaves with only 1 pair of leaflets

Unwinged stems



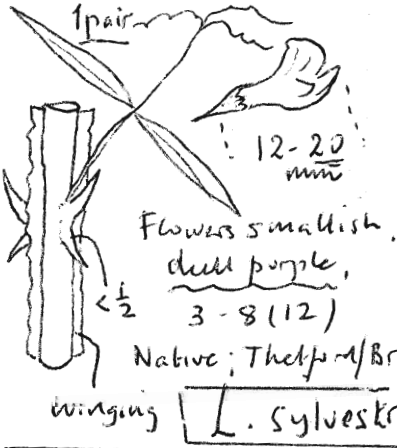
Flowers yellow, 2-5 (12)
L. pratensis



25-35 mm
Flowers pink-purple, v. large
Climbing or sprawling
L. grandiflorus

1 pair
12-20 mm
Flowers red-purple medium sized
c. 3 Norfolk sites (Leam perrut)
Unwinged
L. tuberosus

1 pair of leaflets, winged stems
Everlasting peas



12-22 mm
Flowers smallish bright pink
15-30 mm
Flowers very large bright pink
*
L. latifolius