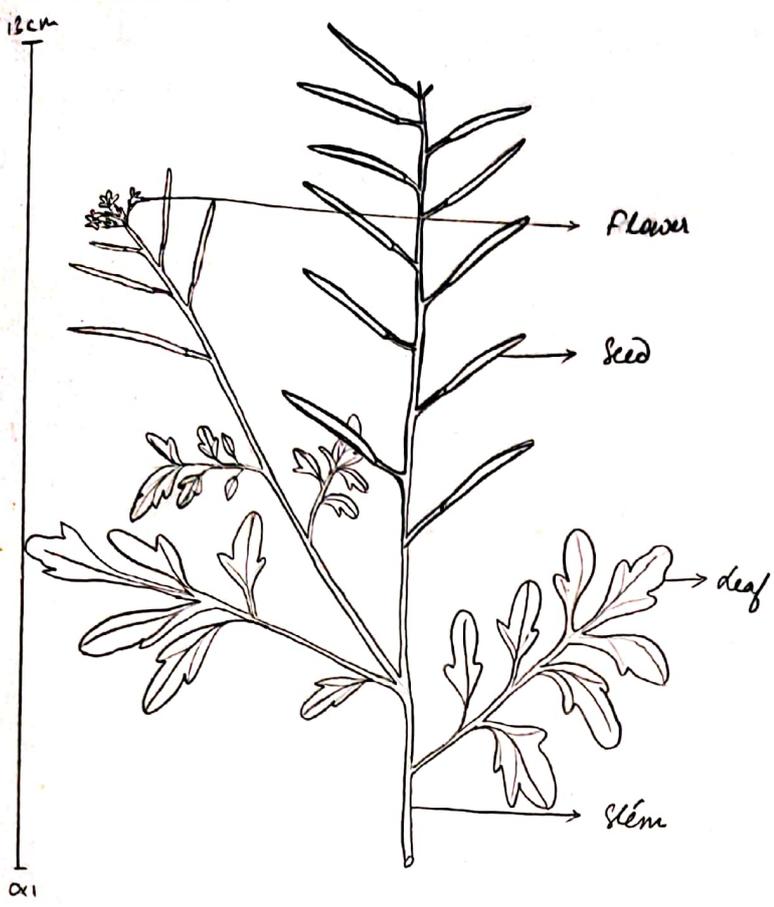
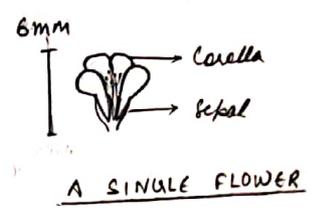


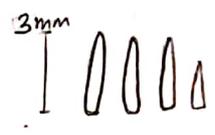
Division - Dicotyledons  
 Subclass - Polypetalae  
 Series - Thalamiflorae  
 Order - Parietales  
 Family - Brassicaceae  
 Genus - Cardamine  
 Species - C. hirsuta



HABIT SKETCH



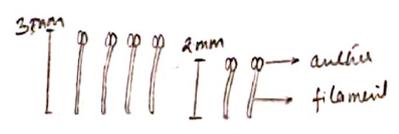
A SINGLE FLOWER



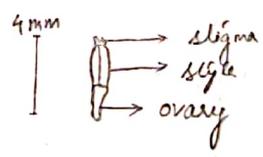
CALYX



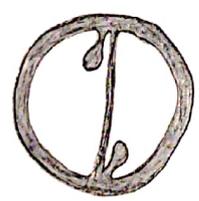
COROLLO



ANDROECIUM



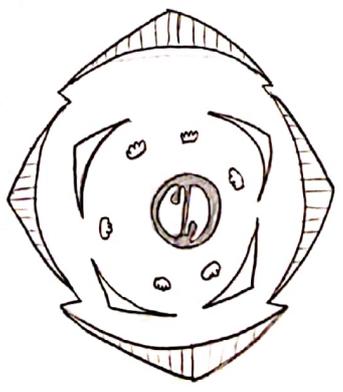
GYNOCIUM



T.S OF OVARY



L.S OF OVARY



FLORAL DIAGRAM

*Handwritten signature and date: 28/01/2012*

Floral formula :  $E_{br} \oplus \overset{\sigma}{K}_4 \overset{\ominus}{C}_4 A_{4+2} \underline{\underset{(2)}{G}}$

## CRUCIFERAE\* (BRASSICACEAE)

*Brassica campestris* Linn. Var. *Sarson*. Prain

**Stem.** Herbaceous, aerial, erect, cylindrical, branched, solid, smooth and green.

**Leaf.** Cauline and ramal, alternate, exstipulate, simple, sessile, lower leaves lyrate with deeply cut margins, acute, glabrous, uncostate, reticulate.

**Inflorescence.** Racemose raceme.

**Flower.** Ebracteate, pedicellate, complete, actinomorphic, hermaphrodite, tetramerous, hypogynous, cyclic and yellow.

**Calyx.** Sepals 4 in two whorls of 2 each, polysepalous, slightly petaloid.

**Corolla.** Petals 4, polypetalous, cruciform, each petal is distinguished into a claw and a limb, valvate.

**Androecium.** Stamens 6 in two whorls (2 + 4), polyandrous, tetradynamous, 4 inner long and 2 outer short, ditheous, basifixed and introrse, glands are present at the base of 4 longer stamens.

**Gynoecium.** Bicarpellary, syncarpous, ovary superior, unilocular but becomes bilocular later on due to the development of a false septum (replum), ovules many in each locule, placentation parietal, style short and stigma is bilobed.

**Fruit.** Siliqua.

**Floral formula.**  $Ebr, \oplus, \ominus, K_{2+2}, C_4, A_{2+4}, \underline{G}_{(2)}$ .

**Classification and identification.**

**Class.** *Dicotyledonae*.

1. Venation reticulate.
2. Flowers pentamerous.

**Sub-Class.** *Polypetalae*

1. Petals free.

**Series.** *Thalamiflorae*

1. Flowers hypogynous and ovary superior.

**Order.** *Parietales*

1. Carpels united to form unilocular ovary with parietal placentation.

**Family.** *Cruciferae*

1. Herbs with alternate exstipulate leaves.
2. Corolla cruciform.
3. Stamens tetradynamous.
4. Ovary bicarpellary, syncarpous, unilocular but becomes bilocular due to the development of a false septum; fruit siliqua.