

# Mustards of New York City

Lydia Paradiso, Graduate Fellow, NYBG

Brassicaceae, the Mustard family, is a large and diverse family with over 4,000 species found worldwide. Their characteristic, pungent odor, apparent when leaves are crushed, is produced by compounds called glycosinolates, which help the plant defend against herbivory. Many culinary vegetables hail from the Mustard family, including broccoli, cabbage, radish, turnip, and horseradish.

To recognize the Mustard family, look for the following:

basal rosette of leaves



*Cardamine hirsuta*  
hairy bittercress



*Capsella bursa-pastoris*  
Shepherds purse

4 petals, often white or yellow  
6 stamens (2 long, 4 short)



*Draba verna*  
common whitlowgrass



*Barbarea vulgaris*  
garden yellowrocket

dry fruit that splits on two sides, with seeds borne on central membrane

siliqua: length > width

silicle: width > length



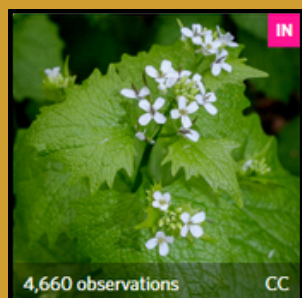
*Cardamine hirsuta*  
hairy bittercress



*Thlaspi arvense*  
field bittercress

Over 50 species in Brassicaceae have been observed growing wild in New York City. A majority of these are introduced, including *Alliaria petiolata* (Garlic Mustard), a highly successful invasive plant, and *Arabidopsis thaliana* (Mouse-ear Cress), a diminutive plant utilized in many molecular biology experiments. Some common natives include *Lepidium virginicum* (Virginia Pepperweed), *Rorippa palustris* (Bog Yellowcress), and the coastal *Cakile edentula* (American Searocket).

## Top species observed in NYC on iNaturalist (based on research grade observations, May 2024)



4,660 observations  
*Alliaria petiolata*  
Garlic Mustard



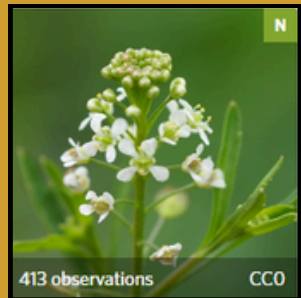
1,515 observations  
*Capsella bursa-pastoris*  
Shepherd's Purse



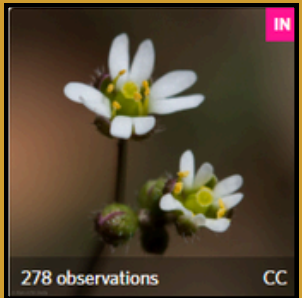
653 observations  
*Cardamine hirsuta*  
Hairy Bittercress



525 observations  
*Descurainia sophia*  
Flixweed



413 observations  
*Lepidium virginicum*  
Virginia Pepperweed



278 observations  
*Draba verna*  
Common Whitlowgrass



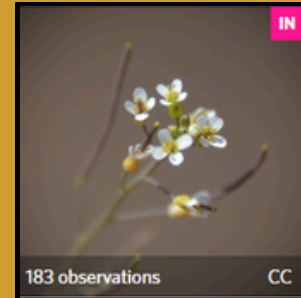
243 observations  
*Lunaria annua*  
Annual Honesty



216 observations  
*Lepidium didymum*  
Lesser Swine-Cress



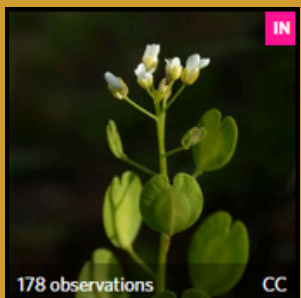
193 observations  
*Barbarea vulgaris*  
Garden Yellowrocket



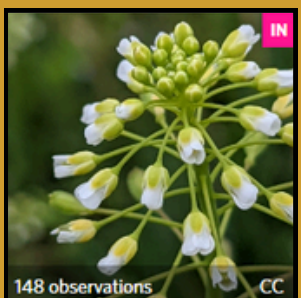
183 observations  
*Arabidopsis thaliana*  
Mouse-ear Cress



181 observations  
*Cardamine concatenata*  
Cut-leaved Toothwort



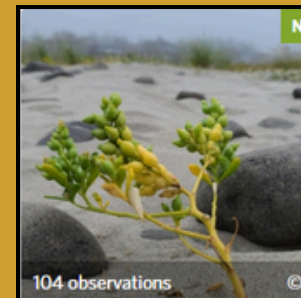
178 observations  
*Thlaspi arvense*  
Field Penny-Cress



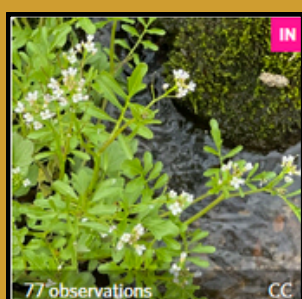
148 observations  
*Mummenhoffia alliacea*  
Garlic Penny-Cress



121 observations  
*Hesperis matronalis*  
Dame's Rocket



104 observations  
*Cakile edentula*  
American Searocket



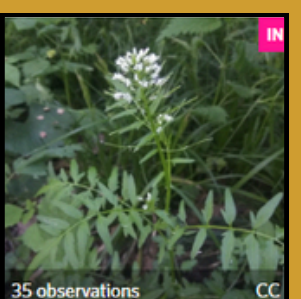
77 observations  
*Cardamine occulta*  
Nursery Bittercress



68 observations  
*Sisymbrium officinale*  
Hedge Mustard



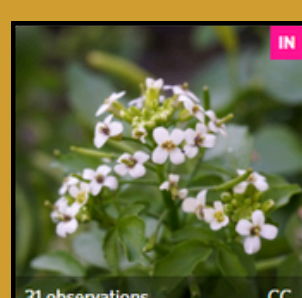
64 observations  
*Rorippa palustris*  
Bog Yellowcress



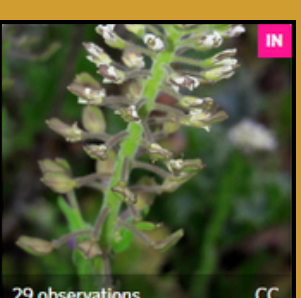
35 observations  
*Cardamine impatiens*  
Narrow-leaved Bittercress



34 observations  
*Sisymbrium loeselii*  
False London-Rocket



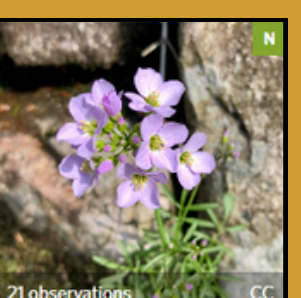
31 observations  
*Nasturtium officinale*  
Watercress



29 observations  
*Lepidium campestre*  
Field Peppergrass



28 observations  
*Lobularia maritima*  
Sweet Alyssum



21 observations  
*Cardamine pratensis*  
Cuckooflower



20 observations  
*Cardamine diphylla*  
Two-Leaved Toothwort

Visit the following resources for more information!

*New York Flora Atlas* (<https://newyork.plantatlas.usf.edu>)

*NYC EcoFlora on iNaturalist* (<https://www.inaturalist.org/projects/new-york-city-ecoflora>)

*Flora of North America* (<http://floranorthamerica.org/>)

*Interactive Key to the Mustards of New England* (<https://gobotany.nativeplanttrust.org/dkey/brassicaceae/>)