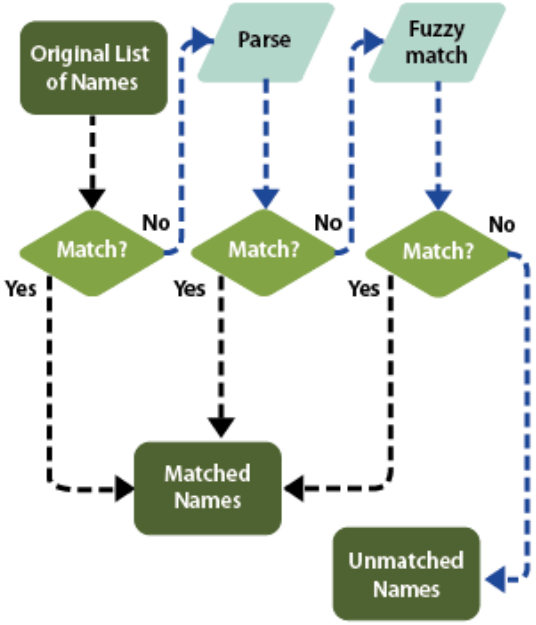
Lessons from Plant Genomics

Taxonomic Name Resolution Service (TNRS)

LAUNCH

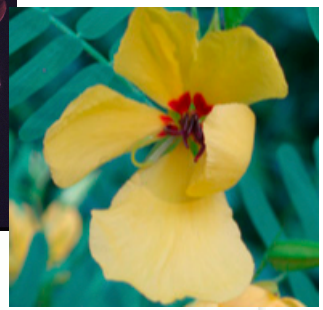
LEARN

The Taxonomic Name Resolution Service (TNRS) is a tool for the computer-assisted standardization of plant scientific names. TNRS corrects spelling errors and alternative spellings to a standard list of names and converts out-of-date names to the currently accepted name. TNRS can process many names at once, saving hours of tedious and error-prone manual name correction.



Variety

Variety: Anatomical and morphological



Plant Ontology (PO)

Home

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Glossary of Plant Anatomy

Enter term: petal [Search Glossary]

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

banner petal [PO:0025324; plant anatomy term]
A petal (PO:0009032) that is the top-most petal of a papilionaceous corolla (PO:0009059).
More

free petal [PO:0025569; plant anatomy term]
A petal (PO:0009032) that is part of a perianth (PO:0009058) that contains fused sepals (PO:0025584) and/or fused petals (PO:0025583), but is separate from the other sepals (PO:0009031) and petals (PO:0009032).
More

fused petal [PO:0025583; plant anatomy term]
A petal (PO:0009032) that is part of a fused corolla (PO:0025581) or a fused perianth (PO:0025580).
More

keel petal [PO:0025326; plant anatomy term]
A petal (PO:0009032) that is one of the two lowest petals of a papilionaceous corolla (PO:0025324).
More

petal [PO:0009032; plant anatomy term]
A phyllome (PO:0006001) that is part of the corolla (PO:0009059), and is usually colored (not green)

Variety: Genes and proteins

Planteome ontologies

Home | Search | Browse | Feedback | Help

Search Planteome ontologies [Petal] terms genes or proteins exact match [Submit Query]

Tree Browser

Filter tree view

Filter by Branch
Ontology
- All
- biological process
- cellular component
- molecular function

View Options
Tree view: Full / Compact

[Set filters]
[Remove all filters]

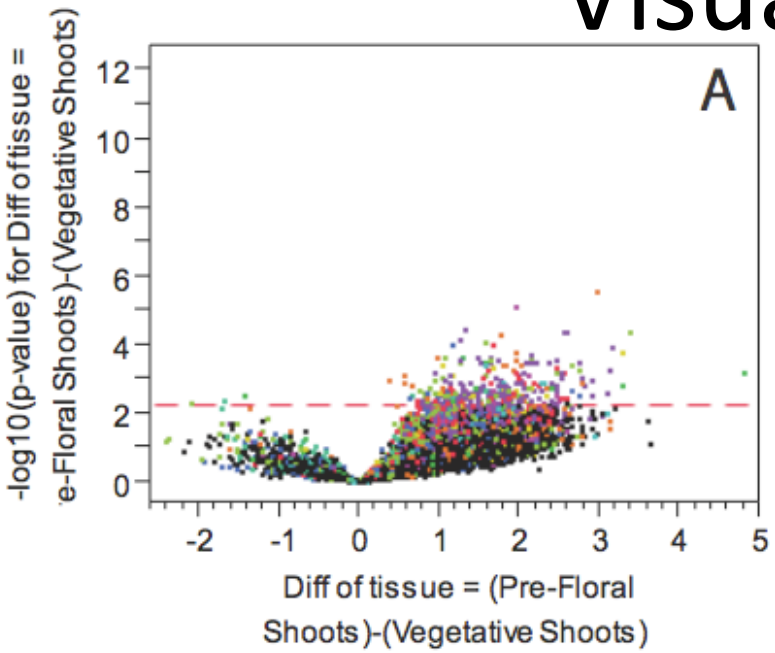
cochleata

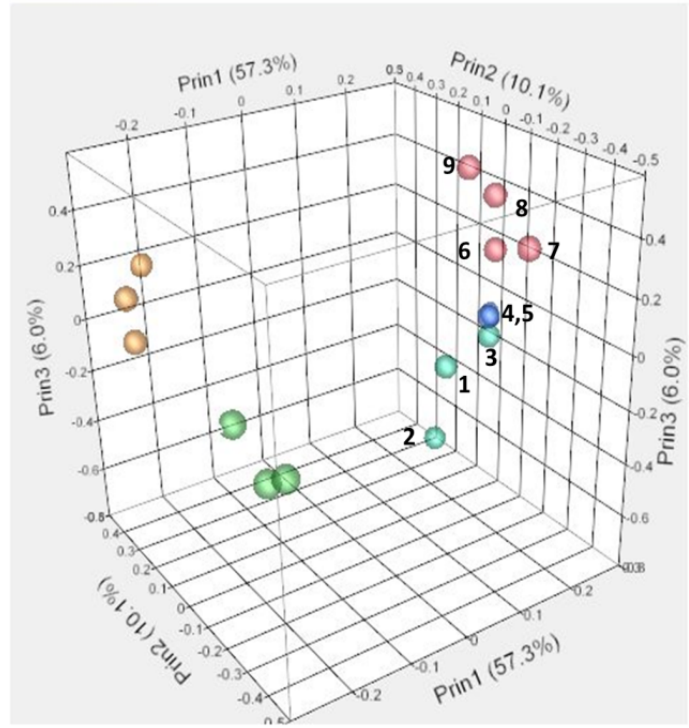
- all : all [239134 gene products]
  - PO:0025131 : plant anatomical entity [104456 gene products]
    - PO:0009011 : plant structure [104456 gene products]
      - PO:0025497 : collective plant structure [86953 gene products]
        - PO:0025007 : collective plant organ structure [86953 gene products]
          - PO:0025023 : collective phyllome structure [56355 gene products]
            - PO:0009059 : corolla [14679 gene products]
              - PO:0009032 : petal [14679 gene products]
            - PO:0009058 : perianth [15832 gene products]
              - PO:0009059 : corolla [14679 gene products]
                - PO:0009032 : petal [14679 gene products]
          - has_participant relationship PO:0025338 : collective plant organ structure development stage [80059 gene products]
            - PO:0025527 : shoot system development stage [80059 gene products]
              - PO:0025530 : reproductive shoot system development stage [59790 gene products]
                - participates_in relationship PO:0025082 : reproductive shoot system [59790 gene products]
                - PO:0009046 : flower [58463 gene products]
                - PO:0009058 : perianth [15832 gene products]

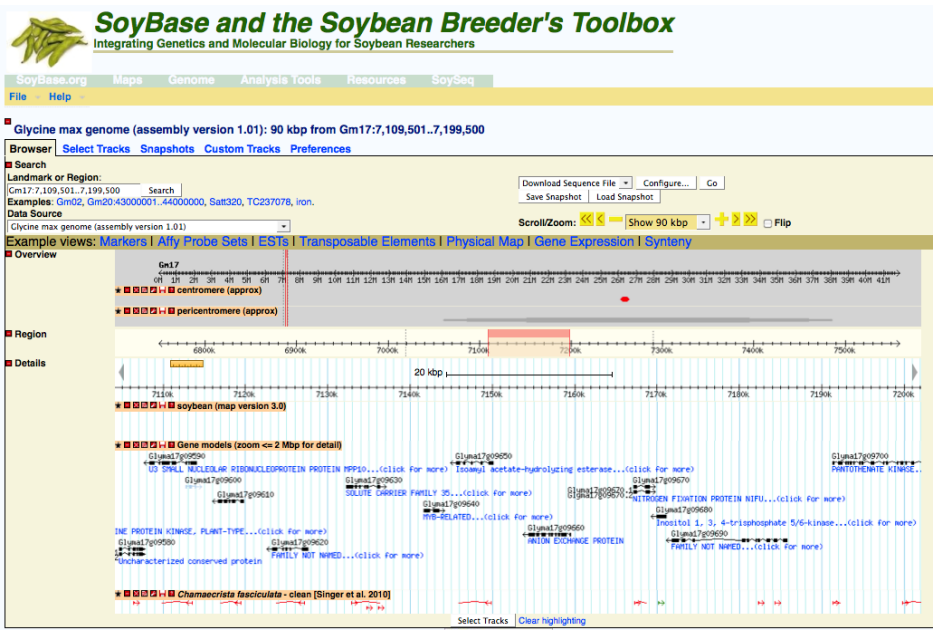
blade-on-petiole

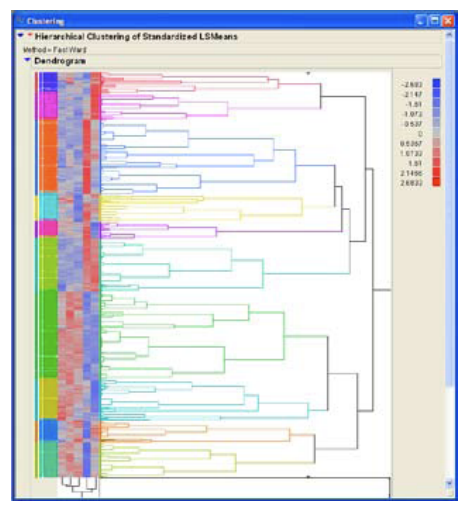
Plantcell Volume 17(5): 434-1448

Visualization



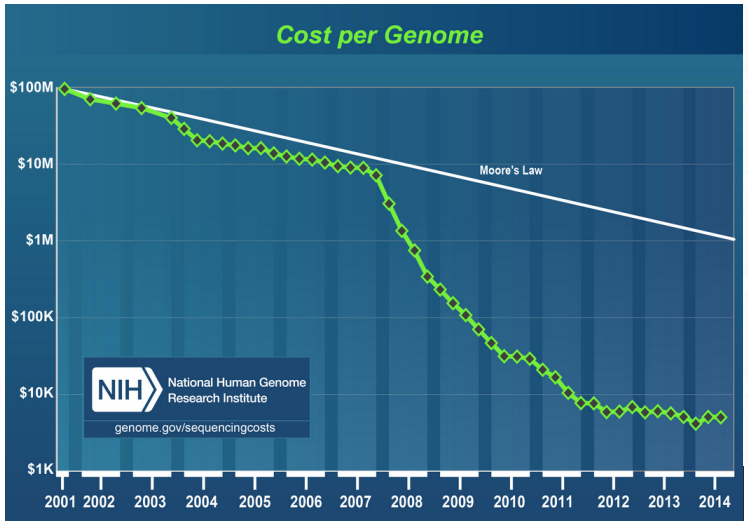




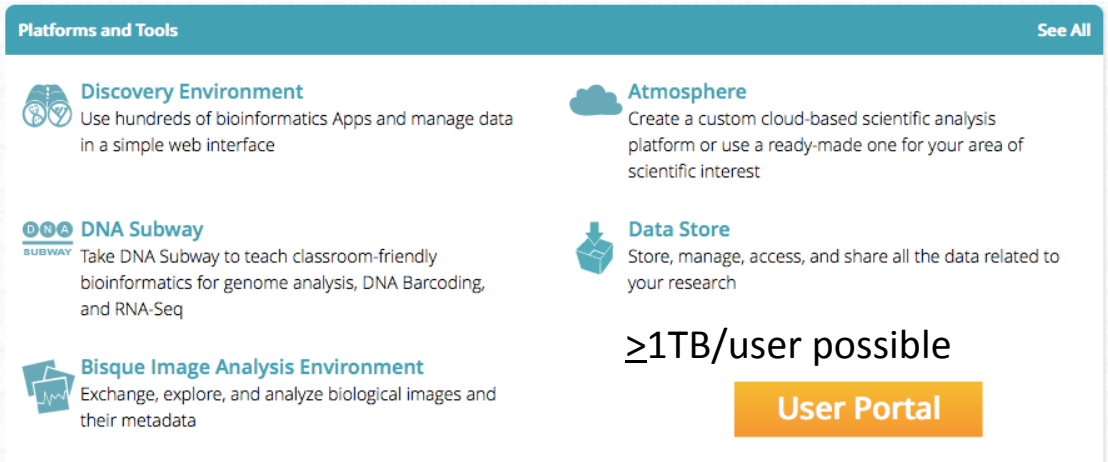


Velocity, Volume, and Veracity

- 2003 Human Genome Project completed after 13 years
- Sanger-based sequencing (average read length=500-600 bases): 6-fold coverage
- 454 sequencing (average read length=300-400 bases): 10-fold coverage
- Illumina and SOLiD sequencing (average read length=50-100 bases): 30-fold coverage



www.genome.gov/sequencingcosts



http://www.iplantcollaborative.org/