



VectorBase

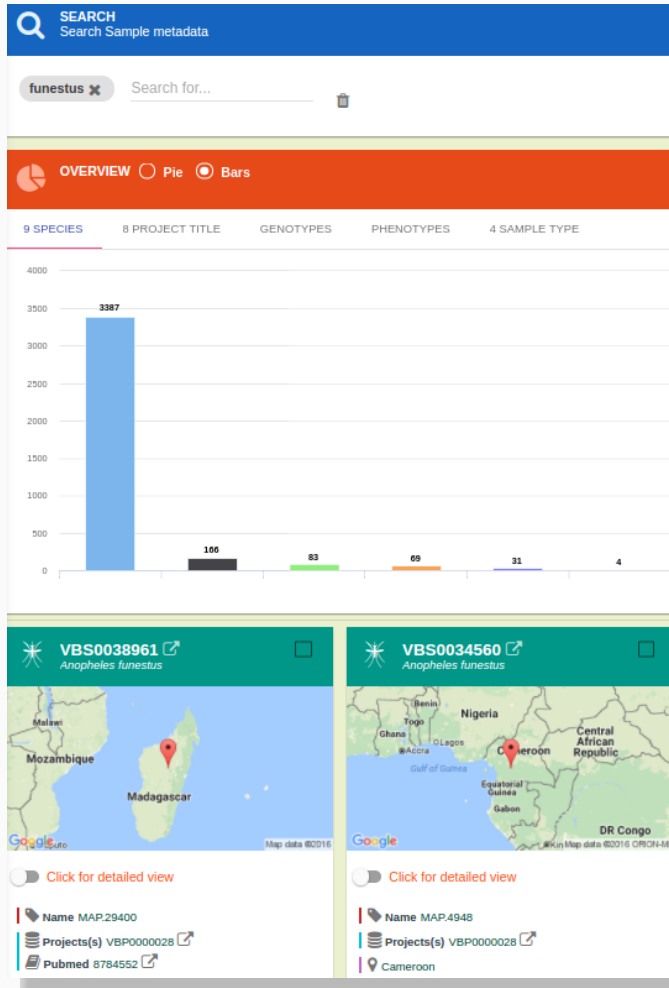
TUTORIALS

Sample Explorer

If you need help with any step of this tutorial please contact us at info@vectorbase.org. Because VectorBase data, tools and resources are updated every two months (6 release cycles per year) and because this tool is still under development, the tutorial steps may look different from what you actually see in VectorBase.



INTRODUCTION



The Sample Explorer allows you to search, explore and display **metadata** associated with biological samples. Examples of such metadata include the geographical origin, susceptibility to insecticides, or assays used in capturing the sample. This metadata might be useful in studying patterns of genetic variation by linking back to the **genome browser**.

You may want to try using the application while reading this guide - click [here](#) to open the Sample Explorer in a separate window.

The app is structured with following

cards:

Overview card Shows statistics about samples matching your query

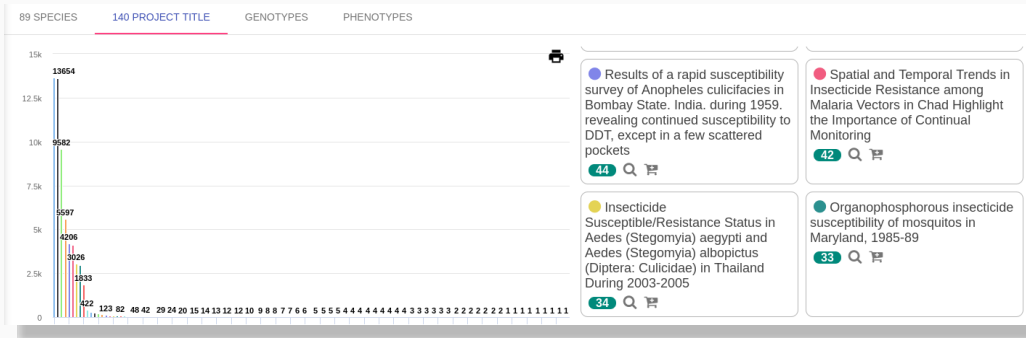
Search card Allows you to search samples by submitting keywords



Sample card Displays metadata describing a biological sample

This software is currently in an evaluation stage and we welcome any [feedback](#) on how it performs, or features that you would like to see.





OVERVIEW



The overview card  shows you different statistics about samples matching your search. You can repartition samples by **project**, **species**, **sample type**, availability of **genotypes** or **phenotypes**, and **download** the associated chart by clicking on .

You can interact with legend items to:

Add  a new search tag to the **search card**



Add  a whole category of samples to the **project card** *(Only categories with less than 100 samples can be added to the project card)*



SEARCH

SEARCH
Search Sample metadata

diptera X Search for...

To search for some samples, start typing a keyword and the **autocomplete** will help you. Once you have selected a keyword it will be added to the query and a new search will be automatically performed. You can click on  to remove a specific keyword, or on  to remove all keywords.



AUTOCOMPLETE

The screenshot shows the Sample Explorer search interface. At the top is a blue search bar with a magnifying glass icon, the text 'SEARCH', and the subtitle 'Search Sample metadata'. Below the search bar, the keyword 'funestus' is entered and has a close button (X). To the right of the search bar, the text 'high|' is entered, and a dropdown menu is open showing a list of suggestions. The suggestions are: 'high' (162), 'highlands' (139), 'highland' (51), 'highly' (11), 'highlight' (9), 'hightower' (2), and 'higher' (1). The 'highlands' suggestion is highlighted in blue. On the left side of the interface, there is an 'OVERVIEW' section with a pie chart icon and the text '9 SPECIES' and '8'.

Suggestion	Count
high	(162)
highlands	(139)
highland	(51)
highly	(11)
highlight	(9)
hightower	(2)
higher	(1)


Autocomplete is **contextual**. It shows only keywords that will produce some results in combination with the keywords you already entered. For each keyword, you can see how many samples will correspond to the new query. For example clicking on **highlands** will create the query '**funestus AND highlands**' with 139 hits.

The keyword **cambodia** would produce no results in

combination with **funestus** so it will never be suggested in this context.




SAMPLES

VBS0001961 
Anopheles gambiae sensu lato

Map showing location in Cameroon, West Africa. Labels include Benin, Nigeria, Ghana, Togo, Accra, Lagos, Gulf of Guinea, Equatorial Guinea, Gabon, Central African Republic, and DR Congo. Map data ©2016 ORION-ME.

☐ Click for detailed view

Name Akonolinga_2002-08-00_049

Projects(s) VBP0000005 

Location Cameroon

Description Anopheles gambiae sensu lato individual
Cameroon

Each sample record card shows the data associated with this sample. Some terms are **links** out to external databases such [BioSamples](#).

Browsing VectorBase Sample Explorer through some samples is a good way to get some ideas for query terms that you might want to use later when configuring the **genotype display**.

Sample cards allow you to switch between a summary view and a detailed view. The

summary view displayed by default shows only the main information about the sample (such as the location or project) and information that matched your query keywords. The **detailed view** shows all available information for the sample.

You can add each individual sample to the **Project Cart** by clicking the

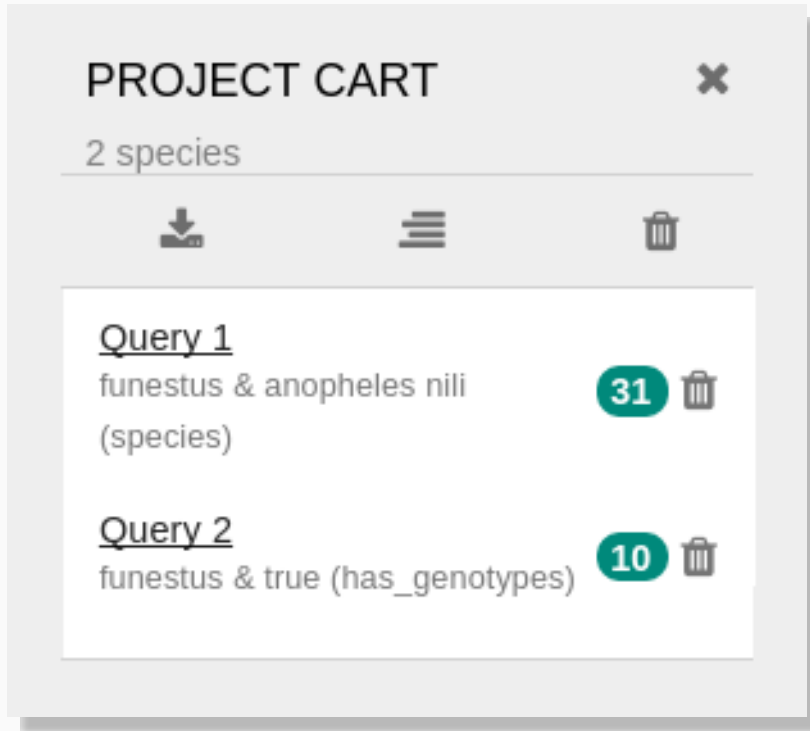


button.

You can click on any field on the sample card to add it as a new search tag to the **search card**



PROJECT CART



To open your project cart,

simply click on the




icon. When you add samples to your project cart, they are



automatically **grouped by a query**. You can rename these

groups of samples. You can

also easily export your samples

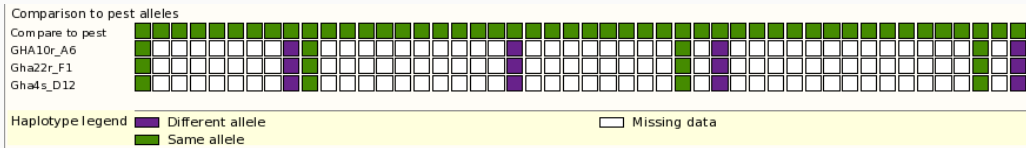
as CSV by clicking , view the genotypes of the selected


samples in the genome

browser by clicking , or clear the project cart from all selected samples by clicking .



GENOME BROWSER

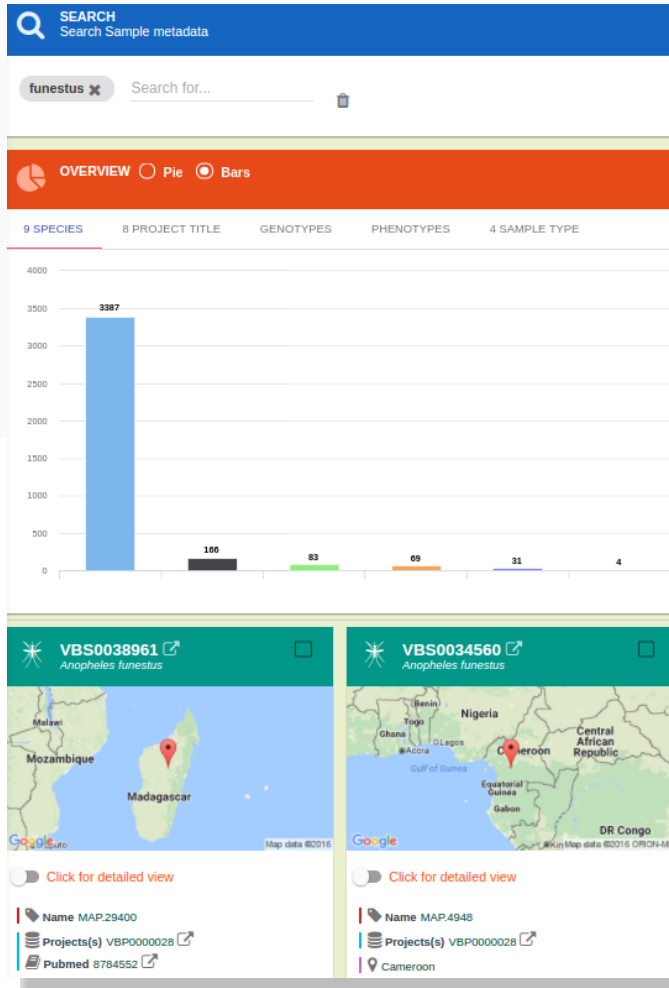


Once you have selected the samples you are interested in, you can view the associated genotypes with the VectorBase Genome Browser by clicking the  icon in your **Project cart**.

Note that this feature is only available if you have selected a species and submitted a transcript id. Only samples containing genotype data will be displayed in the genome browser.



CONCLUSION



Thank you for having taken this quick tour of the main features of the Sample Explorer. You can now click [here](#) to start using the Sample Explorer.

Happy exploring !