CROP WILD RELATIVES DATABASE

National Bureau of Plant Genetic Resources (Indian Council of Agricultural Research)

TUTORIAL





Welcome to Genetic and Genomic Resources

This web portal of genetic and genomic resources of Vigna and Phaseolus provide linking information of specific gene, EST, Nucleotide and Protein with a functional importance to a germplasm Genebank_Id in precision breeding programme. The present scenario of global climatic changes, unsustainability of input intensive agriculture, search for novel genes for food and nutrition, biotic and abiotic stresses have increased the focus on collection, conservation and utilization of potential diversity in the near future to come. So, there is an urgent need to test more and more plant species against the threat of nature and to meet with the challenges by initiating targeted collection and conservation of plant genetic resources including wild relatives of crop plants, and their characterization and evaluation with linking to genomic resources for greater understanding in the form of single window accessibility to botanists, breeders, geneticists, genomic and PGR researchers as well as students.

Home >

By clicking on the link or typing http://www.nbpgr.ernet.in:8080/cwr/iHome.as
px in the address bar, you reach the homepage of this application.

The Home page of the application to introduce the purpose of the application. It is clearly show that the hosting institution is NBPGR which is the part of ICAR, by clicking of the logos you can reach respective homepages.

The gray strip links to other pages of the application. Terms and condition is given at the bottom. Copyright rests with NBPGR.

We can send feedback or any suggestion to contact person through this page.

Genetic and Genomic Resources of Vigna and Phaseolus species

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About> Taxonomy

Taxonomic data of Vigna and Phaseolus species were obtained from USDA ARS-GRIN. The data included information on following 56 species in next image in organism box.

Genetic and Genomic Resources of Vigna and Phaseolus species

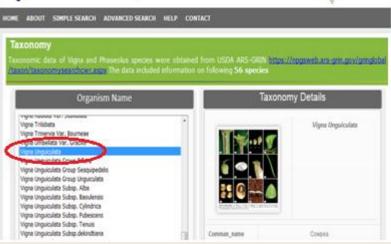


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HOME ABOUT SIMPLE SEARCH ADVANCED SEARCH HELP CONTACT	
Taxonomy Taxonomic data of Vigna and Phaseolus species were obtained from USDA ARS-GRUN https://norsweb.ars-on/taxon/taxonomysearchowr.aspx The data included information on following 56 species	n.gov/gringlobal
Organism Name Taxonomy Details	
Vigna Trilobata	
Vigna Trineniia Var. Bourneae	
Vigne Umbellata Var. Gracilis	
Vigra Unguiculata	
Vigna Unguiculata Group Biflora	
Vigne Unguiculata Group Sesquipedalis	
Vigra Unguiculata Group Unguiculata	
Vigra Unguiculata Subsp. Alba Comman_name	

About> **Taxonomy**

After clicking on organism name, we can show the taxonomy details as common name, family, genus, species, subspecies and other details.





About> Taxonomy

After click on "Vigna Unguiculata" to show the taxonomy details and image of this species.

Genetic and Genomic Resources of Vigna and Phaseolus species



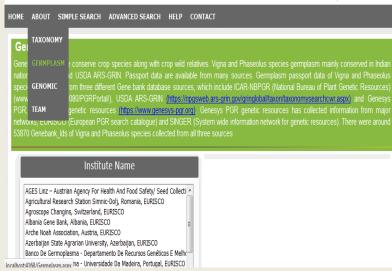


About> Taxonomy

We can zoom image on mouse hove over on the image and also see the full image of this species.

Genetic and Genomic Resources of Vigna and Phaseolus species

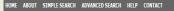




About> Germplasm

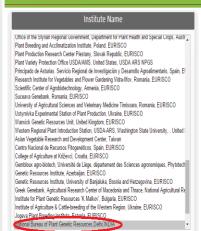
Genebanks worldwide conserve crop species along with crop wild relatives. Vigna and Phaseolus species germplasm mainly conserved in Indian national genebank and USDA ARS-GRIN. Passport data are available from many sources. Germplasm passport data of Vigna and Phaseolus species were taken from three different Gene bank database sources, which include ICAR-NBPGR (National Bureau of Plant Genetic Resources).

This page can be help to search by institute wise species details.



Genebanks

Genetariks workfiwide conserve crop species along with crop wild relatives. Vigns and Phaseolus species germplasm mariny conserved in Indian national genetarik and USDA ARS-GRIN. Passport data are available from many sources. Germplasm passport data all Vigns and Phaseolus species were taken from three different Gene bank database sources, which include CAR-RBPGR, National Bureau of Plant Genetic Resources) (www.nbpgr.entein.0000 PGRPortall), USDA ARS-GRIN.
The sources are a second of the second of th



	Germplasm Details		
stitute Name National Bureau Of Plant Genetic Resources, Delhi, INDIA			
nstitute Code	NBPGR		
Total Germplasm:	16598		
	Organism Wise		
	Organism	Number	A
Vigna Bourneae		2	
Vigna Aconitifolia		1489	ı
Vigna Unguiculata Subsp. Sesquipedalis		<u>12</u>	
Vigna Vexillata		<u>107</u>	
Phaseolus Lunalus		<u>49</u>	
Vigna Trinervia Var. Bour	теае	3	
Vigna Sp.		6	v

About> Germplasm

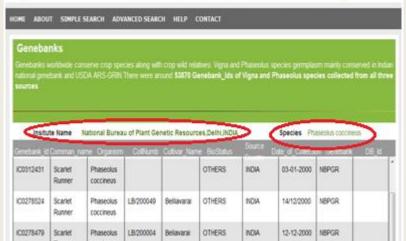
After click on the name of institute as "National Bureau of Plant Genetic Resources, Delhi, India", we can see the details of species are conserve in prospective institute.

If we have click on institute code as "NBPGR" then go to FAO categorised institute page.

We click on red circle as number 2 as "vigna Bourneae" then after we can see the next image which are full details of germplasm.

Genetic and Genomic Resources of Vigna and Phaseolus species





About> Germplasm

We see here institute name and species details as

Genebank_Id,Comman_name,Organism,CollNumb,Cultivar_Name,BioStatus,SourceCountry,Date_of_Collection,Genebank,DB_Id.

Genetic and Genomic Resources of Vigna and Phaseolus species

localhost:4168/GenomicResource.aspx

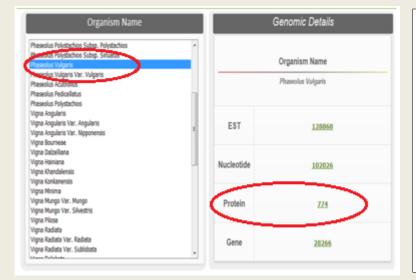


We TAXONOMY	enetic and Genomic Resources	CONTACT INFORMATION
GERMPLASI	genetic and genomic resources of Vigna and Phaseolus provide	Name
nkin _{genomic} npo	of specific gene , EST , Nucleotide and Protein with a functional rmplasm Genebank_Id.This may assist molecular breeders in	Email
tresses have in otential diversity nore and more hallenges by in	emplasm Genebank_Id in precision breeding programme. The if global climatic changes, unsustainability of input intensive h for novel genes for food and nutrition, biotic and abiotic ncreased the focus on collection, conservation and utilization of in the near future to come. So, there is an urgent need to test olant species against the threat of nature and to meet with the ititating targeted collection and conservation of plant genetic	Subject
	ng wild relatives of crop plants, and their characterization and iking to genomic resources for greater understanding in the form	SEND

About> Genomic

The genomic data mainly included sequences of nucleotide, EST, protein and gene of Vigna and Phaseolus species.

This page used to search genomic data.



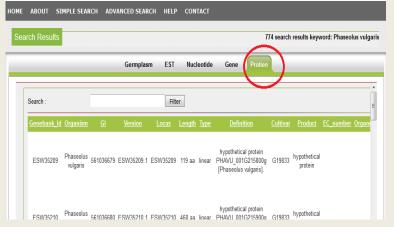
About> Genomic

After clicking on organism name, we can see the number of genomic resources.

We can see the full details of genomic resources after click on hyperlink as number. If we click on red oval as protein "774" then we can show in next image.

Genetic and Genomic Resources of Vigna and Phaseolus species



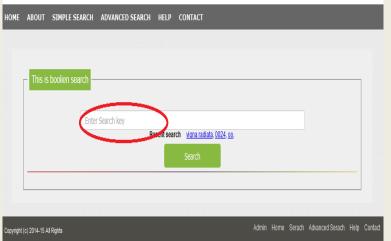


About> Genomic

If we want to show the EST, Nucleotide, Germplasm and gene then click on respective tab.

Genetic and Genomic Resources of Vigna and Phaseolus species



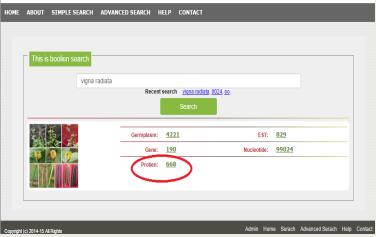


Simple Search>

This page is used for Boolean search for this application.

We can enter any key in textbox after that click on search button, to show the number of species.



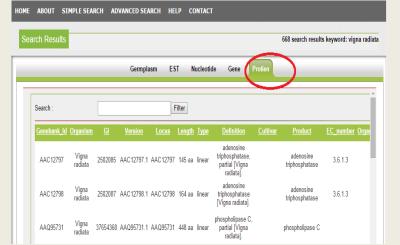


Simple Search>

We enter key "vigna radiata" in textbox after that click on search button, to show the number species as in image. Click on protein hyperlink to show details of species of protein.

Genetic and Genomic Resources of Vigna and Phaseolus species



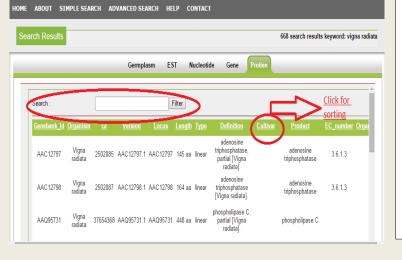


Simple Search>

See full details of genomic resource of protein as Geanbankld, GI, Version, Locus, Length, Type, definition, cultivar, product, EC_number, organelle, gene, pubmed and authors. If we click on another tab to show prospective details.

Genetic and Genomic Resources of Vigna and Phaseolus species





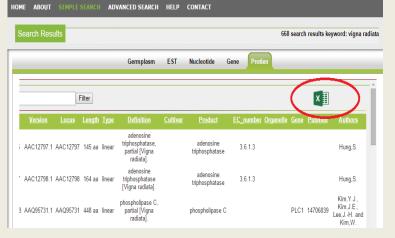
Simple Search>

This page also provides facility to search data in populated view, and also we can sort data on clicking header name as red circle in image.



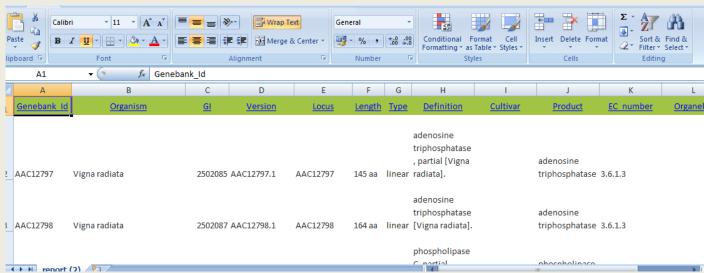
The above strip is navigate to another page of data in populated view.





Simple Search>

This page also provides facility to export data in excel file. Click on excel logo for download data in respective tab. After download excel file we can see bellow image.



Genetic and Genomic Resources of Vigna and Phaseolus species

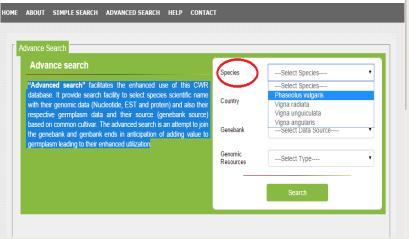


Advance search		
10.000	Species	Select Species
"Advanced search" facilitates the enhanced use of this CWR database. It provide search facility to select species scientific name		
with their genomic data (Nucleotide, EST and protein) and also their	Country	SEARCH COUNTRY
respective germplasm data and their source (genebank source) based on common cultivar. The advanced search is an attempt to join		
the genebank and genbank ends in anticipation of adding value to	Genebank	Select Data Source
germplasm leading to their enhanced utilization.		
	Genomic Resources	Select Type
		Search

Advanced Search>

"Advanced search" facilitates the enhanced use of this CWR database. It provides search facility to select species scientific name with their genomic data (Nucleotide, EST and protein) and also their respective germplasm data and their source (genebank source) based on common cultivar. The advanced search is an attempt to join the genebank and genbank ends in anticipation of adding value to germplasm leading to their enhanced utilization.





Advanced Search>

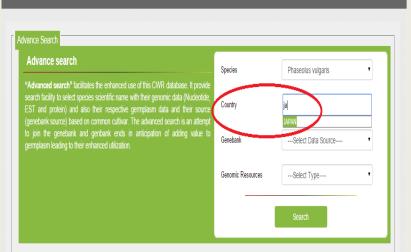
In advanced search there are four criteria based on different selection.

First criteria are based on species name, select species from drop down list and click on search button, find respective data.

Vigna and Phaseolus species



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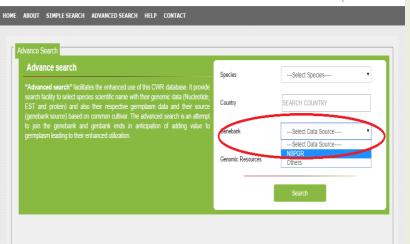


Advanced Search>

Second criteria is country name, we are start typing in textbox to display automatically country name, select and click search button.







Advanced Search>

Third criteria is genebank, we can select from dropdown list, after that click on search button.



Advance Search

Advance Search

Advance search

"Advanced search" facilitates the enhanced use of this CWR database. It provide search facility to select species scentific name with their genomic data (Nudeotide, EST and protein) and also their respective gemplasm data and their source (genebank source) based on common cultima. The advanced search is an affecting to join the genebank and genbank ends in anticipation of adding value to gemplasm leading to their enhanced utilization.

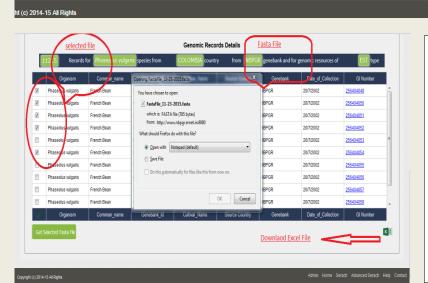
Search

Search

Advanced Search>

Forth criteria are based on species, country, genebank, and Genomic We Resources. are select species, country, genebank and also select genomic resource, after that click on search button to show data view in next image.

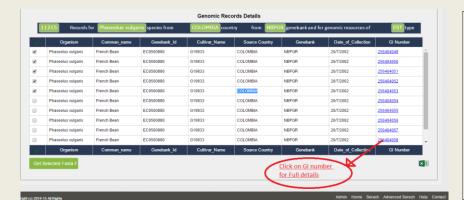




Advanced Search>

Download fasta File: First select checkbox in right side in populated data view after that click on "Get Selected Fasta File" button, open a save dialog box as given image. We can save file in your hard drive or directly open in your system. We can export all data in excel file after clicking on excel logo.

Admin Home Serach Advanced Serach Help Contact



Advanced Search>

Click on hyperlink GI number as "blue number" to show the full details in next image.

Genetic and Genomic Resources of Vigna and Phaseolus species





Advanced Search>

After click "GI Number" to show the Geanbank id, Version,Organism,Lenth,Mol_type,Difinitio n,Cutivar,Product,Organelle,Gene,Pubmed, Authors and also see the sequence of fasta file.

Genetic and Genomic Resources of Vigna and Phaseolus species





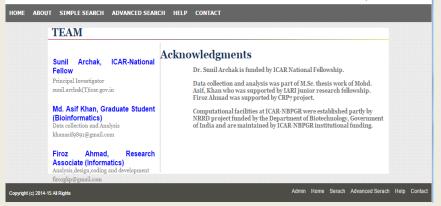
Contact>

Information contained in this application is a result of various sources.

User desirous to know more about these activates can contact the relevant persons whose contact details are given.

Genetic and Genomic Resources of Vigna and Phaseolus species





Contact>

This page lists the members of team that has designed, developed and maintaining this application.

It is not a credit pages; but a page that shows whose owns the responsibility of running the application.