# FCAG survey Questions October 2017



### Introduction

FlyBase will start to formally curate phenotypic data induced or modified by chemical treatment (e.g. phenotypic effects caused by exposing flies to the herbicide paraquat or rotenone) and/or nutritional challenges (e.g. phenotypic effects caused by keeping flies on a diet low in iron). As part of this process
new report pages for chemical compounds will be created. This survey is focused on the content and organization of these new pages.

#### **General Information section**

This is a mock-up of the General information section of the new chemical compound report. Most of this information will be pulled from the ChEBI website (ChEBI is a dictionary of small chemical compounds of biological interest).

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STOGGCAATCOTTAN ACCOUNTING ON AT COUNTING ON	FlyBase	chemical compound paraquat	
Home T	pols Downloads Links Community Species About Help Archives		J2G ▼ Jump to Gene Go
		Help	○ Open All □ Close All
General Info			
Name FlyBase ID	paraquat FBch12345		
ChEBI ID	CHEBI:34905		CH <sub>3</sub>
Definition	An organic cation that consists of 4,4'-bipyridine bearing two N-methyl substituents loctated a	t the 1- and 1'-	rt_
Synonyms	1,1'-Dimethyl-4,4'-bipyridinium		
	1,1'-dimethyl-4,4'-bipyridyldiylium		
	dimethyl viologen		
	methyl viologen ion(2+)		
	N,N'-dimethyl-4,4'-bipyridinium		
	N,N'-dimethyl-4,4'-bipyridinium dication		
	Paraquat paraquat dication	——————————————————————————————————————	, <sup>,</sup> <sup>,</sup>
	paraquat ion		
Roles	Application(s) herbicide	d	CH <sub>3</sub>
Classification	A substance used to destroy plants		
Usage			
Paraquat is a re contributions v	edox-active heterocyclic compound used to induce in vivo oxidative stress in flies. It has been linke	d to development of Parkinson's disease in humans and is	also used to model the disease in flies.
Yes	this is sufficient  — I'd like you to add the following information: ase specify:		
mock-up for com allowing Do you updates	re considering including a <u>Usage field</u> (placed just o above), where notes on the usage within the Dros monly employed compounds (please look at the my users to send us updates and/or correction reque think such a field should be present in the chemical/corrections?	sophila field would be summar ock-up above for an example s ests would be also included. Il compound report and would	ized in a brief narrative summary). A link you contribute
	, I think such brief summaries would be very useful and compounds I use in my research	d I am likely to contribute update	s or corrections to reports

Yes, I think such brief summaries would be very useful, although I am unlikely to contribute updates or corrections

No, I think it is not worth the effort to produce these summaries

rite them below	 		



#### Phenotype and Interactions Annotations sections.

The next 3 questions are to help us decide the format of the sections showing the phenotypes associated with chemical treatments. Note that we propose to divide the Phenotype Annotations section in two subsections – 'In wild-type background' and 'In mutant background'. The former would contain annotations for cases when a treatment was applied to wild-type or wild-type like flies (i.e. animals carrying mutations that are known or presumed to be phenotypically silent – e.g. driver-only controls etc.), inducing a phenotype. The latter would contain annotations for cases when a treatment was applied to genetically perturbed flies, inducing a phenotype, but no formal interaction relationship between the treatment and the genotype is described by the authors (e.g. 'Almost all Gabat<sup>f01602</sup> flies raised on a sucrose-only diet die within 7 days').

#### Option A Phenotype Annotations In wild-type background phenotype Λ induced by (treatment) Λ reference locomotor behavior defective | adult stage (Filograna et al., 2016) details ♥ chemical treatment by diet: paraquat short lived (Filograna et al., 2016) details ♥ chemical treatment by diet: paraquat Phenotype chemical treatment by diet: paraquat adult brain manifests in Λ reference phenotype induced by (genotype and/or treatment) lethal - all die before end of larval stage xyz[12] AND chemical treatment by diet: paraquat (hypothetical reference) details 🗸 xyz[12] AND chemical treatment by diet: paraquat (hypothetical reference) details ♥ mbryonic/larval brain | larval stage manifests in **Chemical Compound-Gene Interaction Annotations** - Modifier of (Outgoing Interactions) phenotype ^ induced by (genotype and/or treatment) ^ interaction ^ modifier (genotype and/or treatment) ^ reference Phenotypic class | locomotor behavior defective | adult stage park[25]/park[25] is enhanced by chemical treatment by diet: paraquat (hypothetical reference) details ♥ Phenotype indirect flight muscle | adult stage park[25]/park[25] is enhanced by chemical treatment by diet: paraquat (hypothetical reference) details ♥ manifests in - Modified by (Incoming Interactions) ^ induced by (genotype and/or treatment) ^ interaction ^ modifier (genotype and/or treatment) ^ reference phenotype locomotor behavior defective | adult stage | chemical treatment by diet: paraquat | is NOT suppressed by Phenotypic class Sod1[Scer\UAS.cWa]; Scer\GAL4[da.PU] (Filograna et al., 2016) details ♥ Sod1[Scer\UAS.cWa]; Scer\GAL4[da.PU] (Filograna et al., 2016) details ♥ chemical treatment by diet: paraquat is NOT suppressed by locomotor behavior defective | adult stage chemical treatment by diet: paraquat is suppressed | partially by | Sod2[Scer\UAS.cMa]; Scer\GAL4[da.PU] | (Filograna et al., 2016) | details ◆ short lived chemical treatment by diet: paraquat is suppressed | partially by | Sod2[Scer\UAS.cMa]; Scer\GAL4[da.PU] | (Filograna et al., 2016) | details park[25]/park[25] AND Sod2[dsRNA.Scer\UAS.cKa]; Phenotype nanifests in indirect flight muscle | adult stage chemical treatment by diet: paraquat is enhanced by Scer\GAL4[elav-C155] (hypothetical reference) details $\Psi$ Chemical Compound-Chemical Compound Interaction Annotations - Modifier of (Outgoing Interactions) phenotype A induced by (treatment) A interaction A modifier (treatment) A reference chemical treatment by diet: paraquat $\hspace{.1in}$ (hypothetical reference) details lacksquarePhenotypic class long lived nutrient decreased: triglyceride is suppressed by Phenotype - Modified by (Incoming Interactions) Λ induced by (treatment) Λ interaction Λ modifier (treatment) Λ reference phenotype chemical treatment by diet: rotenone (hypothetical reference) details ♥ Phenotypic class locomotor behavior defective | adult stage | chemical treatment by diet: paraquat | is enhanced by Phenotype

Phenotype Annotations In wild-type background						
	type (class) ^		induced by (treatment)	٨	reference	_
ocomotor behavior defective   adult stage	type (diade)	cher		(Filograna et al., 2016)	details	
hort lived		cher	mical treatment by diet: paraquat		(Filograna et al., 2016)	details
phenotype adult brain	e (manifests in)	cher	induced by (treatment) nical treatment by diet: paraguat	٨	reference (hypothetical reference)	dotaile
dan bran		CHE	mear treatment by aret. paraguat		(hypothetical rejerence)	uetalis
In mutant background				٨		
ethal - all die before end of larval stage	type (class) ^		ed by (genotype and/or treatment)  D chemical treatment by diet: paraquat	Λ	reference (hypothetical reference)	details
ethal an are before that of larvar stage		Ay2[12] File	b enemical reactions by area paraguat		(hypothetical rejerence)	uctuni
	e (manifests in)		ed by (genotype and/or treatment)	۸	reference	1 . 0
mbryonic/larval brain   larval stage		xyz[12] AN	D chemical treatment by diet: paraquat		(hypothetical reference)	details
+ Detailed Phenotype Descriptions						
Chemical Compound-Gene Interactio	n Annotations					
- Phenotypic Data						
- Modifier of (Outgoing Interaction)  phenotype (class) ^	induced by (genotype and/or treatment) ^	interaction ^	modifier (genotype and/or treatment)	٨	reference	
ocomotor behavior defective   adult		is enhanced by	chemical treatment by diet: paraquat		(hypothetical reference)	details
,	paragraph paragraph	,			,	
phenotype (manifests in)	induced by (genotype and/or treatment) ^	interaction ^	modifier (genotype and/or treatment)	٨	reference	
ndirect flight muscle   adult stage	park[25]/park[25]	is enhanced by	chemical treatment by diet: paraquat		(hypothetical reference)	details
Modified by (Incoming Interactions)						
phenotype (class) ^	induced by (genotype and/or treatment) ^	interaction ^	modifier (genotype and/or treatment)	٨		
ocomotor behavior defective   adult stage	chemical treatment by diet: paraquat	is NOT suppressed by	Sod1[Scer\UAS.cWa]; Scer\GAL4[da.PU]		(Filograna et al., 2016)	details
hort lived	chemical treatment by diet: paraquat	is NOT suppressed by	Sod1[Scer\UAS.cWa]; Scer\GAL4[da.PU]		(Filograna et al., 2016)	details
and the second s	ab a sectoral base base and base of the sector and	is some second by a section by	C-date-adulac and Co-dated but		(5)1t( 2010)	details
ocomotor behavior defective   adult stage	chemical treatment by diet: paraquat	is suppressed   partially by	Sod2[Scer\UAS.cMa]; Scer\GAL4[da.PU]		(Filograna et al., 2016)	uetans
hort lived	chemical treatment by diet: paraquat	is suppressed   partially by	Sod2[Scer\UAS.cMa]; Scer\GAL4[da.PU]		(Filograna et al., 2016)	details
phenotype (manifests in)	induced by (genotype and/or treatment) ^	interaction ^	modifier (genotype and/or treatment)	٨	reference	
ndirect flight muscle   adult stage	park[25]/park[25] AND	is enhanced by	Sod2[dsRNA.Scer\UAS.cKa];		(hypothetical reference)	dotails
nancet jugit musele   adait stage	chemical treatment by diet: paraquat	is emidiced by	Scer\GAL4[elav-C155]		(Hypothetical rejerence)	uetalis
+ Detailed Phenotype Descriptions						
Chemical Compound-Chemical Comp	ound Interaction Annotations					
- Phenotypic Data						
- Modifier of (Outgoing Interaction)  phenotype (class) ^	induced by (treatment) ^	interaction ^	modifier (treatment)	٨	reference	
ong lived	nutrient decreased: triglyceride	is suppressed by	chemical treatment by diet: paraquat		(hypothetical reference)	details
phenotype (manifests in) ^	induced by (treatment) ^	interaction ^	modifier (treatment)	۸	reference	
- Modified by (Incoming Interactions)  phenotype (class)  ^	induced by (treatment) ^	interaction ^	modifier (treatment)	٨	reference	
hort lived	chemical treatment by diet: paraquat	is enhanced by	chemical treatment by diet: rotenone		(hypothetical reference)	details
phenotype (manifests in)	induced by (treatment) A	interaction A	modifi- (ttt)	٨		
phenotype (manifests in) ^	induced by (treatment) ^	interaction ^	modifier (treatment)		reference	
						-

In wild speaking penalogie (class)  A induced by (treatment) by diet paraquat  (Plograna et al., 20)  A chemical treatment by diet paraquat  (Plograna et al., 20)  (Plograna et al., 2	deta  deta  deta  ) deta
chemical treatment by diet: paraquat  filinganae et al., 2014 duit brain  phenotype (class)  paraquat  phenotype (class)  phenotype (class)  paraquat  phenotype (class)  paraquat  phenotype (class)  paraquat  phenotype (class)  phenotype (class)  paraquat  phenotype (class)  paraquat  phenotype (class)  paraquat  phenotype (class)  phenotype (class)  paraquat  phenotype (class)  paraquat  paraquat  phenotype (class)  paraquat  paraquat  paraquat  phenotype (class)  phenotype (class)  paraquat  paraquat  phenotype (class)  paraquat  paraquat  paraquat  paraquat  paraquat  paraquat  paraquat  paraquat  phenotype (class)  paraquat  pa	deta  ) deta  ) deta  ) deta
phenotype (manifest in)  A genotype (class)  A genotype (class)  A genotype (class)  A induced by treatment by diet; paraguat  A phenotype (class)  A genotype (class)  A induced by treatment by diet; paraguat  A phenotype (class)  A phenotype (class)  A penotype (cl	) deta
A genotype (class)  phenotype (class)  phenotype (class)  phenotype (manifest in)  phenotype (manifest in)  phenotype (manifest in)  phenotype (class)  pank(25)/pank(25)  phenotype (class)  phenotype (cl	) deta
In mutant background  phenotype (class)  A genotype	) deta
phenotype (class)  phenotype (class)  phenotype (class)  phenotype (manifest in)  phenotype (man	) deta
phenotype (manifest in)  phenotype (manifest i	) deta
phenotype (manifests in)	) deta
phenotype (manifests in)	) deta
Detailed Phenotype Descriptions    Indication   Phenotype   Class   Phenotype   Ph	) deta
Internation   Compound-Gene   Interaction   Annotations	
Phenotype (class)	
phenotype (class)	
comotor behavior defective   adult age   park[25]/park[25]   induced by   treatment   A   interaction   A   genotype   A   interacti	
phenotype (manifests in)    phenotype (manifests in)    phenotype (lass)    phenotype (class)    phenotype (class)    phenotype (lass)    phenotyp	
phenotype (manifests in)  genotype   A   treatment   A   interaction   genotype   A   treatment   A   reference    direct flight muscle   adult stage   park[25]/park[25]     is enhanced by   is enhanced by     chemical treatment by diet: paraquat    Modified by (incoming interactions)  phenotype (class)   A   genotype   A   induced by   treatment   A   interaction   A   genotype   A   flower   Genotype   A   induced by    comotor behavior defective   adult stage   chemical treatment by diet: paraquat   is NOT suppressed by   Sod1[Scer\UAS.cWa]; Scer\GAL4[da.PU]   (Filograna et al., 201)  comotor behavior defective   adult stage   chemical treatment by diet: paraquat   chemical treatment by diet: paraquat   is suppressed   partially by   Sod2[Scer\UAS.cMa]; Scer\GAL4[da.PU]   (Filograna et al., 201)  comotor behavior defective   adult stage   chemical treatment by diet: paraquat   chemical treatment by diet: paraquat   induced by   treatment   is suppressed   partially by   Sod2[Scer\UAS.cMa]; Scer\GAL4[da.PU]   (Filograna et al., 201)  phenotype (manifests in)   A   genotype   A   induced by   treatment   A   interaction   A   genotype   A   induced by   Interaction   A   genotype   A   induced by   Interaction   A   genotype   A   Interaction   A   Intera	
Modified by (Incoming Interactions)   Phenotype (class)	
Modified by (Incoming Interactions)   phenotype (class)     genotype	) deta
phenotype (class)    phenotype	Geta
phenotype (class)  genotype  A treatment A interaction genotype A treatment A reference components of the paragraph of the pa	
paraquat  comotor behavior defective   adult stage  chemical treatment by diet:	
paraquat   SNOT suppressed by   Scer\GAL4[da.PU]   Scer\GAL4[da.PU]   Chemical treatment by diet:   paraquat   SNOT suppressed by   Scer\GAL4[da.PU]   Sod2[Scer\UAS.cMa];   Scer\GAL4[da.PU]   Scer\GAL4[da.P	deta
paraquat    paraquat   s NOI suppressed by   Scer\GAL4[da.PU]	
paraquat suppressed   partially by   Scer\GAL4[da.PU]   Scer\GAL4[da.PU]    chemical treatment by diet:   paraquat   suppressed   partially by   Scer\GAL4[da.PU]   Scer\GAL4[da.PU]    phenotype (manifests in)	deta
paraquat suppressed partially by Scer\GAL4[da.PU] (Filograna et al., 2016)  phenotype (manifests in)	deta
phenotype (manifests in)  genotype	deta
direct flight muscle   adult stage   park/251/park/251   AND chemical treatment by diet:   is enhanced by   seed to be a seed of the seed	
arrect flight muscle   dutil stage   park[25], park[25]   AND   paraquat   Is enhanced by   Scer\GAI4[elav-C155]   In paraquat   Scer\GAI4[elav-C155]	
F-1-1-1-1	deta
Detailed Phenotype Descriptions	
hemical Compound-Chemical Compound Interaction Annotations Phenotypic Data	
Modifier of (Outgoing Interaction)  phenotype (class) ^ induced by (treatment) ^ interaction ^ modifier (treatment) ^ referent	
ng lived nutrient decreased: triglyceride is suppressed by chemical treatment by diet: paraquat (hypothetical referen	) deta
phenotype (manifests in)	
Modified by (Incoming Interactions)  phenotype (class) ^ induced by (treatment) ^ interaction ^ modifier (treatment) ^ referent	
nort lived chemical treatment by diet: paraquat is enhanced by chemical treatment by diet: rotenone (hypothetical referen	) deta
phenotype (manifests in)	
	+
Detailed Phenotype Descriptions	

6. In the <u>Chemical compound - Gene Interaction Annotations section</u> , do you prefer to have all interaction annotations – including those involving non-Dmel transgenes (so called 'xenogenetic' interactions) – displayed together in one Gene-Chemical Compound Interaction section or do you prefer to have a separate subsection for xenogenetic interactions?	
all together	
separate subsection for xenogenetic interactions	
7. If you have any additional comments regarding the display, organization or content of the Interaction sections, please write them in the box below	

### Free-text display

To improve the user experience, we propose to include a button next to each annotation statement which would link to the narrative summaries (free-text) of the observed phenotypes our curators produce during the curation process. (On the allele report pages, these summaries are currently displayed separately - in the Detailed Description or Additional Comments subsections of the Phenotypic Data or Interaction sections, respectively)

* 8. I	How	would	you	like	the	'details'	button	to	work
--------	-----	-------	-----	------	-----	-----------	--------	----	------

	Option A: floating box with the text description appears upon mouse-over/click
$\bigcirc$	Option B: upon clicking the annotation area is enlarged to reveal the text
	I do not want the 'details' button at all, I would prefer to have all the phenotypic descriptions placed in a separate subsection
	I don't know.

#### Option A

to will be a beat would			_		_
In wild-type background					
phenotype (class)	٨	induced by (treatment)	٨	reference	
ocomotor behavior defective   adult stage		chemical treatment by diet: paraquat		(Filograna et al., 2016)	detailm
short lived		chemical treatm exposed to 1mM paraquat resu exposed to 1mM paraquat show trols after 7 days.	lts in sh climbir	nortened adult lifespan. ng defects compared to	Flies con-
phenotype (manifests in)	۸	induced b			
adult brain		chemical treatment by alet: paraquat		(hypothetical reference)	details
In mutant background					
phenotype (class)	۸	induced by (genotype and/or treatment)	٨	reference	
ethal - all die before end of larval stage		xyz[12] AND chemical treatment by diet: paraquat		(hypothetical reference)	details
phenotype (manifests in)	۸	induced by (genotype and/or treatment)	٨	reference	
embryonic/larval brain   larval stage		xyz[12] AND chemical treatment by diet: paraquat		(hypothetical reference)	details

- In wild-type background					
phenotype (class)	٨	induced by (treatment)	٨	reference	
locomotor behavior defective   adult stage		chemical treatment by diet: paraquat		(Filograna et al., 2016)	details
		Exposure to 5mM paraquat results in shortened adult lifespan. Flies expose compared to controls after 7 days.	d to 1ml	M paraquat show climbing	g defects
short lived		chemical treatment by diet: paraquat		(Filograna et al., 2016)	details
phenotype (manifests in)	٨	induced by (treatment)	٨	reference	
adult brain		chemical treatment by diet: paraquat		(hypothetical reference)	details
- In mutant background					
phenotype (class)	٨	induced by (genotype and/or treatment)	٨	reference	
lethal - all die before end of larval stage		xyz[12] AND chemical treatment by diet: paraquat		(hypothetical reference)	details
		xyz[12] mutant animals raised on food containing 6mM paraquat do not sur severe larval brain morphology defects with frequent lesion.	vive bey	rond the larval stage and	display
phenotype (manifests in)	٨	induced by (genotype and/or treatment)	٨	reference	
embryonic/larval brain   larval stage		xyz[12] AND chemical treatment by diet: paraquat		(hypothetical reference)	details V

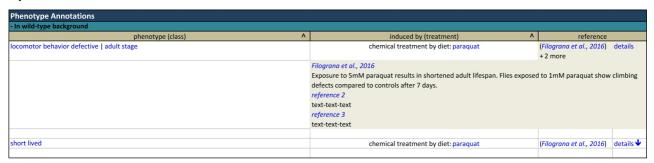
### Free-text display

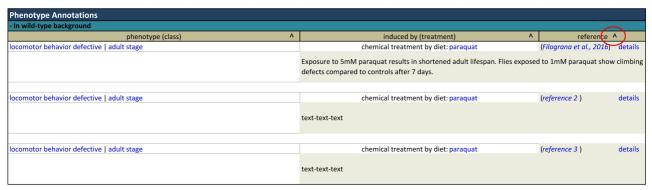
9. How would you like to have the references and free-text summaries organized when the same annotation	is
referenced by multiple papers? Please choose your preferred display option from the ones below.	

	O	ption A:	The	'details'	text-box	contains	free-text	t summaries	from a	all the	references	cited for	or each	annotation
--	---	----------	-----	-----------	----------	----------	-----------	-------------	--------	---------	------------	-----------	---------	------------

- Option B: Annotations are repeated for each cited reference (> one reference per row), the 'details' text-box only includes the free-text summary from that particular reference. Please note that choosing this option would also mean an additional sorting category (reference)
- Option C: An icon is displayed next to each reference and clicking on it reveals the free-text summary from that particular reference

#### **Option A**





#### **Option C** Clicking on the one the reference Filograna et al reveals the free-text for this reference Phenotype Annotations - In wild-type background phenotype (class) induced by (treatment) locomotor behavior defective | adult stage chemical treatment by diet: paraguat (Filograna et al., 2016), (reference 2, Exposure to 5mM paraquat results in shortened adult lifespan. Flies exposed to 1mM paraquat show climbing defects compared to controls after 7 days. short lived chemical treatment by diet: paraquat (Filograna et al., 2016) details ♥ Clicking on the licon by the reference 2 reveals the free-text for that reference Phenotype Annotations reference (Filograna et al., 2016), (reference 2), (reference 3,, (reference phenotype (class) induced by (treatment) locomotor behavior defective | adult stage chemical treatment by diet: paraquat text-text-text short lived (Filograna et al., 2016) details ♥ chemical treatment by diet: paraquat

### 10. What would you like to have displayed in the <u>Detailed Phenotype Descriptions</u>:

Option A: Only free-text descriptions of phenotypes (or lack of a phenotype) that have no associated CV term
annotations (and therefore would not be discoverable through the 'details' button)

Option B: All phenotype summaries, including those associated with CV terms (these would then be duplicated in the 'details' part of the annotation statements)

#### Option A

- In wild-type background					
phenotype (class)	٨	induced by (treatment)	٨	reference	
locomotor behavior defective   adult stage		chemical treatment by diet: paraquat		(Filograna et al., 2016)	details
		Exposure to 5mM paraquat results in shortened adult lifespan. Flies exposed compared to controls after 7 days.	d to 1m	M paraquat show climbin	g defects
short lived		chemical treatment by diet: paraquat		(Filograna et al., 2016)	details <b>4</b>
phenotype (manifests in)	٨	induced by (treatment)	٨	reference	
adult brain		chemical treatment by diet: paraquat		(hypothetical reference)	details <b>4</b>
- In mutant background					
phenotype (class)	٨	induced by (genotype and/or treatment)	٨	reference	
lethal - all die before end of larval stage		xyz[12] AND chemical treatment by diet: paraquat		(hypothetical reference)	details
		xyz[12] mutant animals raised on food containing 6mM paraquat do not sur severe larval brain morphology defects with frequent lesion.	vive bey	vond the larval stage and	display
phenotype (manifests in)	٨	induced by (genotype and/or treatment)	٨	reference	
embryonic/larval brain   larval stage		xyz[12] AND chemical treatment by diet: paraquat		(hypothetical reference)	details 🗸
- Detailed Phenotypic Descriptions					
	text		_	reference	_
	text				

- In wild-type background				
phenotype (class)	٨	induced by (treatment)	reference	_
locomotor behavior defective  adult stage		chemical treatment by diet: paraquat	(Filograna et al., 2016)	details
		Exposure to 5mM paraquat results in shortened adult lifespan. Flies exposed to 1m compared to controls after 7 days.	M paraquat show climbin	g defects
short lived		chemical treatment by diet: paraquat	(Filograna et al., 2016)	details <b>V</b>
phenotype (manifests in)	٨	induced by (treatment)	reference	
adult brain		chemical treatment by diet: paraquat	(hypothetical reference)	details <b>V</b>
- In mutant background				
phenotype (class)	٨	induced by (genotype and/or treatment) ^	reference	
lethal - all die before end of larval stage		xyz[12] AND chemical treatment by diet: paraquat	(hypothetical reference)	details
		xyz[12] mutant animals raised on food containing 6mM paraquat do not survive bey severe larval brain morphology defects with frequent lesion.	yond the larval stage and	display
	٨	induced by (genotype and/or treatment) ^	reference	
phenotype (manifests in)				
The second of th		xyz[12] AND chemical treatment by diet: paraquat	(hypothetical reference)	details <b>4</b>
phenotype (manifests in)  embryonic/larval brain   larval stage  - Detailed Phenotypic Descriptions		xyz[12] AND chemical treatment by diet: paraquat	(hypothetical reference)	details <b>V</b>
embryonic/larval brain   larval stage  - Detailed Phenotypic Descriptions	ext	xyz[12] AND chemical treatment by diet: paraquat	(hypothetical reference)	details <b>4</b>
embryonic/larval brain   larval stage  - Detailed Phenotypic Descriptions  te				details
embryonic/farval brain   larval stage  - Detailed Phenotypic Descriptions	ıraqu	at show climbing defects compared to controls after 7 days.	reference	details



### Free-text display

### Propagation of data to allele reports

A Gene - Chemical Compound Interaction Annotations section will be added to the allele report - its format and content will follow that of its counterpart on the chemical compound report.

There are cases where annotations relate to phenotypes observed upon a treatment being applied to genetically perturbed flies, but where no formal interaction relationship between the treatment and the genotype is described by the authors e.g. 'Almost all Gabat<sup>f01602</sup> flies raised on a sucrose-only diet die within 7 days.'

genotype is described by the authors e.g. 'Almost all Gabat <sup>f01602</sup> flies raised on a sucrose-only diet die within 7 days.'
In the chemical compound report these annotations would belong to the proposed 'In mutant background' subsection of the Phenotype Annotations part of the report.
12. What is your preferred location for the display of such annotations on the corresponding allele reports (i.e. $Gaba^{f01602}$ allele report in the example below)?
Option A: In a special 'In combination with treatments' subsection of the Phenotypes section on the respective allele report(s)
Option B: In an 'Unspecified interactions' subsection of Gene – Chemical Compound Interaction Annotations
Combination of Options A&B: Depending on the complexity of the mutant genetic background these should be divided between dedicated subsections within the Phenotype Annotations (single gene mutants only) and the Gene – Chemical Compound Interaction Annotations (all other cases)

General Information								
Symbol	Dmel\Gabatf01602		Species		D. melanog	aster		
Name			FlyBase ID		FBal02226	73		
Feature type	allele		Associated go	ene	Dmel\Gaba	t		
Associated Insertion(s)	PBac{WH}Gabat <sup>f01602</sup>		Carried in Co	nstruct				
Also Known As	gabat <sup>f</sup>							
	gubut							
Genomic Maps								
GBrowse JBrowse								
Allele class								
Mutagen								
Recent Updates     Rece								
Nature of the Allele								
Expression Data								
☐ Phenotypic Data								
Phenotypic Class								
Phenotype Manifest In								
- In combination with treatment(s)								
phenotype (clas	s)			type and/or treatment)		reference	a	
short lived			Gapat[i01602]/Gabat[f016	02] AND diet limited to: sucrose		(Maguire et al., 2015)	details <b>V</b>	
phenotype (manife:	sts in)		induced by (geno	type and/or treatment)		reference		
Option A								
+ Detailed Phenotype Descriptions		iomano cara mana	Parlament School Control Control				ACT RESIDENCE TO	
External Data								
<b>→</b> Interactions								
Gene - Chemical Compound Intera	ctions							
- Phenotypic Data								
- Modified by (Incoming Interactions)								
phenotype (class)	induced by (genotype and/or		interaction	modifier (genotype and/or t		reference		
short lived	Gabat[f01602]/Gabat[f016 diet limited to: sucre		is suppressed by	Gabat[Scer\UAS.T:SV5\V5,T: Scer\GAL4[elav.PU		(Maguire et al., 2015)	details <b>Ψ</b>	
	diet illilited to. Such	ose		Scer (GAL4[elav.PO	1			
short lived	Gabat[f01602]/Gabat[f016		is suppressed by	Gabat[Scer\UAS.T:SV5\V5,T:	Zzzz\His6];	(Maguire et al., 2015)	details <b>4</b>	
	diet limited to: sucr	ose	is suppressed by	Scer\GAL4[repo.PU	]	(magane et an, 2013)	uctuiis v	
	Gabat[f01602]/Gabat[f016	5021 AND						
short lived	diet limited to: sucr		is suppressed   partially by	nutrient added: L-glutam	iic acid	(Maguire et al., 2015)	details 🖖	
	C-11[(04.002]/C-11[(04.	2021 4 N D						
short lived	Gabat[f01602]/Gabat[f016 diet limited to: sucre		is suppressed by	nutrient added: L-leuc	cine	(Maguire et al., 2015)	details 🛡	
	diet illilited to. Such	530						
phenotype (manifests in)	induced by (genotype and/or	r treatment)	interaction	modifier (genotype and/or t	reatment)	reference		
- Modifier of (Outgoing Interaction)								
phenotype (class)	induced by (genotype and/or	treatment)	interaction	modifier (genotype and/or t	reatment)	reference		
		,		10 71	,			
phenotype (manifests in)	induced by (genotype and/or	r treatment)	interaction	modifier (genotype and/or t	reatment)	reference		
- Unspecified Interactions								
phenotype (clas	s)			type and/or treatment)		reference		
short lived			Gabat[f01602]/Gabat[f016	02] AND diet limited to: sucrose		(Maguire et al., 2015)	details <b>V</b>	
phenotype (manife	sts in)		induced by (geno	type and/or treatment)		reference		
			7,10					
Option B								
+ Detailed Phenotype Descriptions								
● Complementation and Rescue Data	1							
• Images (0)								
Stocks (1)								
Notes on Origin								
External Crossreferences and Links	outs (0)							
Synonyms and Secondary IDs (5)								
References (3)								



### Priorities for future expansion

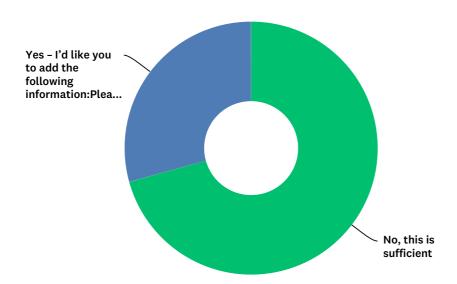
	High priority	Medium priority	Low priority	no need to curate these dat at all
chemical compound–protein physical interactions				
effect of chemical treatments/nutritional challenges on gene expression levels	$\bigcirc$			
effect of naturally occurring regulatory compounds (e.g. hormones) on gene expression				
metabolite level changes induced by genetic mutations				
metabolite level changes induced by treatments				
spatio-temporal pattern of expression of naturally occurring regulatory compounds (e.g. hormones)				
usage of chemical compounds as markers of tissues, subcellular components and biological processes  her – please specify				
components and biological processes  her – please specify  1. Thank you for taking the time to complete this survey. If you			nments or su	ggestions
components and biological processes her – please specify			nments or su	ggestions
components and biological processes  her – please specify  1. Thank you for taking the time to complete this survey. If you			nments or su	ggestions
components and biological processes  her – please specify  1. Thank you for taking the time to complete this survey. If you			nments or su	ggestions
components and biological processes  her – please specify  1. Thank you for taking the time to complete this survey. If you			nments or su	ggestions
components and biological processes  her – please specify  1. Thank you for taking the time to complete this survey. If you			nments or su	ggestions



### FCAG survey responses

### Q1 Is there any other general information you would like to see displayed in this section?

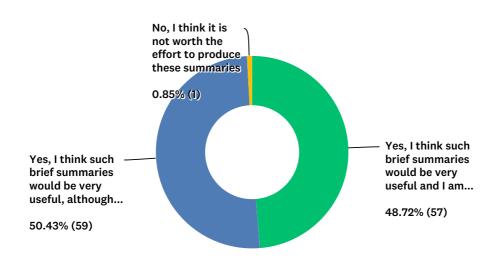




ANSWER CHOICES	RESPONSES	
No, this is sufficient	70.69%	32
Yes – I'd like you to add the following information:Please specify:	29.31% 3	34
TOTAL	11	16

Q2 We are considering including a Usage field (placed just under the General Information section as in the mock-up above), where notes on the usage within the Drosophila field would be summarized in a brief narrative for commonly employed compounds (please look at the mock-up above for an example summary). A link allowing users to send us updates and/or correction requests would be also included.Do you think such a field should be present in the chemical compound report and would you contribute updates/corrections?

Answered: 117 Skipped: 1



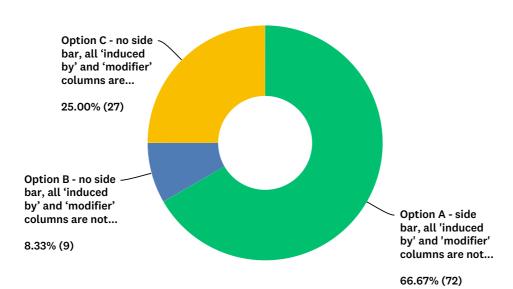
ANSWER CHOICES	RESPON	NSES
Yes, I think such brief summaries would be very useful and I am likely to contribute updates or corrections to reports on compounds I use in my research	48.72%	57
Yes, I think such brief summaries would be very useful, although I am unlikely to contribute updates or corrections myself	50.43%	59
No, I think it is not worth the effort to produce these summaries	0.85%	1
TOTAL		117

### Q3 If you have any additional comments regarding the display, organization or content of this section, please write them below

Answered: 15 Skipped: 103

## Q4 Which is your preferred display style (please bear in mind that the number of columns in each section also changes the number of categories that can be used to sort the annotations by):

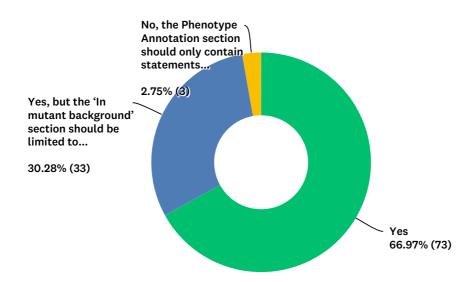
Answered: 108 Skipped: 10



ANSWER CHOICES	RESPON	ISES
Option A - side bar, all 'induced by' and 'modifier' columns are not subdivided into genotype vs. treatment columns	66.67%	72
Option B - no side bar, all 'induced by' and 'modifier' columns are not subdivided into genotype vs. treatment columns	8.33%	9
Option C - no side bar, all 'induced by' and 'modifier' columns are subdivided into genotype vs. treatment columns (> more sorting categories)	25.00%	27
TOTAL		108

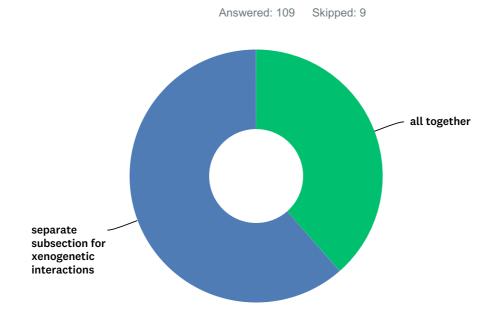
### Q5 In the Phenotype Annotations section, do you like the division of annotations into 'In wild-type background' and 'In mutant background'?





ANSWER CHOICES	RESPON	ISES
Yes	66.97%	73
Yes, but the 'In mutant background' section should be limited to annotations involving only 'simple' genotypes (single or double mutants), annotations with more complex genotypes should be displayed somewhere else	30.28%	33
No, the Phenotype Annotation section should only contain statements describing phenotypic effects of chemical treatments/nutritional challenges in wild-type animals	2.75%	3
TOTAL		109

Q6 In the Chemical compound - Gene Interaction Annotations section, do you prefer to have all interaction annotations – including those involving non-Dmel transgenes (so called 'xenogenetic' interactions) – displayed together in one Gene-Chemical Compound Interaction section or do you prefer to have a separate subsection for xenogenetic interactions?

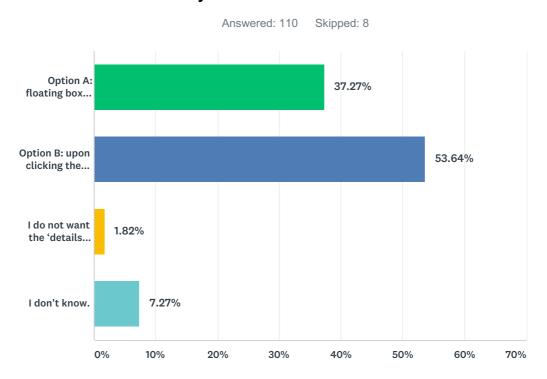


ANSWER CHOICES	RESPONSES	
all together	38.53%	42
separate subsection for xenogenetic interactions	61.47%	67
TOTAL		109

## Q7 If you have any additional comments regarding the display, organization or content of the Interaction sections, please write them in the box below

Answered: 11 Skipped: 107

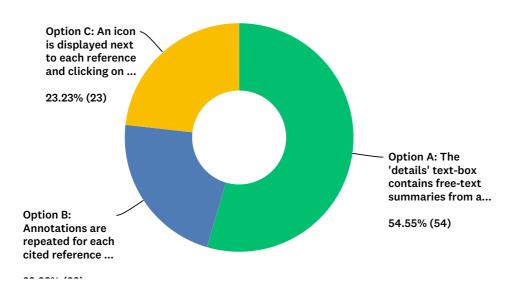
### Q8 How would you like the 'details' button to work



ANSWER CHOICES	RESPO	NSES
Option A: floating box with the text description appears upon mouse-over/click	37.27%	41
Option B: upon clicking the annotation area is enlarged to reveal the text	53.64%	59
I do not want the 'details' button at all, I would prefer to have all the phenotypic descriptions placed in a separate subsection	1.82%	2
I don't know.	7.27%	8
TOTAL		110

Q9 How would you like to have the references and free-text summaries organized when the same annotation is referenced by multiple papers? Please choose your preferred display option from the ones below.

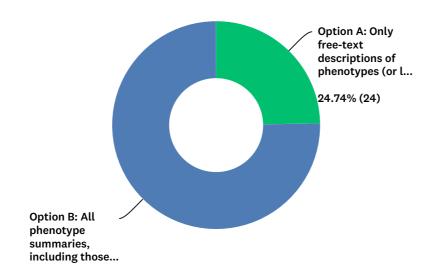
Answered: 99 Skipped: 19



ANSWER CHOICES		RESPONSES	
Option A: The 'details' text-box contains free-text summaries from all the references cited for each annotation	54.55%	54	
Option B: Annotations are repeated for each cited reference (> one reference per row), the 'details' text-box only includes the free-text summary from that particular reference. Please note that choosing this option would also mean an additional sorting category (reference)	22.22%	22	
Option C: An icon is displayed next to each reference and clicking on it reveals the free-text summary from that particular reference	23.23%	23	
TOTAL		99	

### Q10 What would you like to have displayed in the Detailed Phenotype Descriptions:

Answered: 97 Skipped: 21



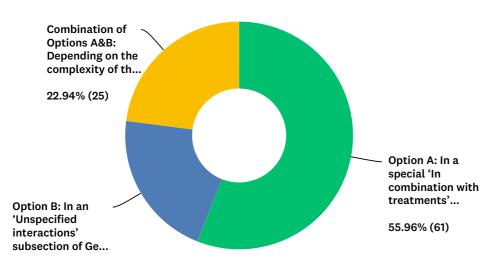
ANSWER CHOICES	RESPON	SES
Option A: Only free-text descriptions of phenotypes (or lack of a phenotype) that have no associated CV term annotations (and therefore would not be discoverable through the 'details' button)	24.74%	24
Option B: All phenotype summaries, including those associated with CV terms (these would then be duplicated in the 'details' part of the annotation statements)	75.26%	73
TOTAL		97

### Q11 If you have any comments regarding the free-text display please write them in the box below

Answered: 6 Skipped: 112

## Q12 What is your preferred location for the display of such annotations on the corresponding allele reports (i.e. Gabaf01602 allele report in the example below)?

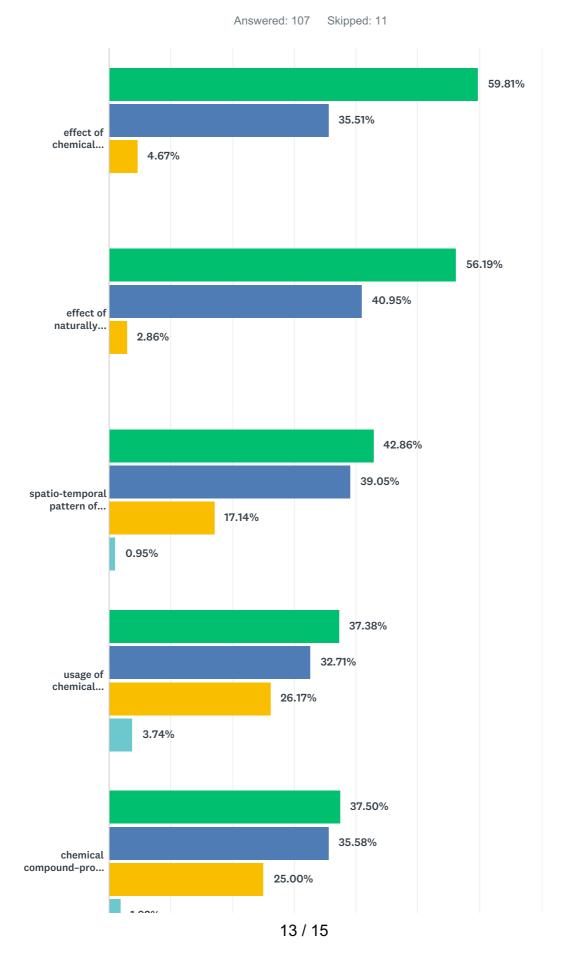
Answered: 109 Skipped: 9

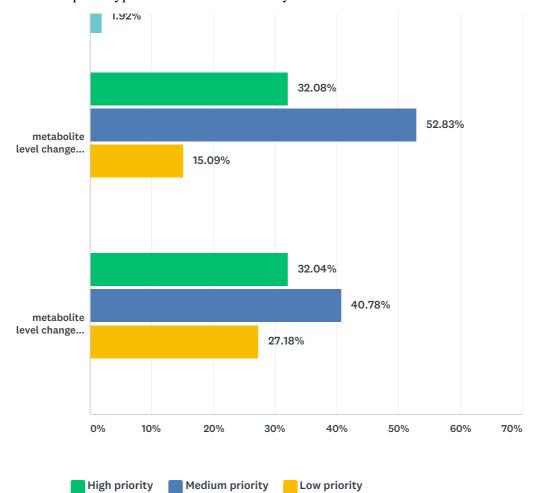


21	.1	0	%	(23)
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=1113 73 1257		
ANSWER CHOICES	RESPON	ISES
Option A: In a special 'In combination with treatments' subsection of the Phenotypes section on the respective allele report(s)	55.96%	61
Option B: In an 'Unspecified interactions' subsection of Gene – Chemical Compound Interaction Annotations	21.10%	23
Combination of Options A&B: Depending on the complexity of the mutant genetic background these should be divided between dedicated subsections within the Phenotype Annotations (single gene mutants only) and the Gene – Chemical Compound Interaction Annotations (all other cases)	22.94%	25
TOTAL		109

## Q13 If we were to expand the amount of curated data involving chemical compounds, what order of priority would you suggest for the following possibilities:





no need to curate these data at all

	HIGH PRIORITY	MEDIUM PRIORITY	LOW PRIORITY	NO NEED TO CURATE THESE DATA AT ALL	TOTAL	WEIGHTED AVERAGE
effect of chemical treatments/nutritional challenges on gene expression levels	59.81% 64	35.51% 38	4.67% 5	0.00%	107	3.55
effect of naturally occurring regulatory compounds (e.g. hormones) on gene expression	56.19% 59	40.95% 43	2.86% 3	0.00%	105	3.53
spatio-temporal pattern of expression of naturally occurring regulatory compounds (e.g. hormones)	42.86% 45	39.05% 41	17.14% 18	0.95% 1	105	3.24
usage of chemical compounds as markers of tissues, subcellular components and biological processes	37.38% 40	32.71% 35	26.17% 28	3.74% 4	107	3.04
chemical compound–protein physical interactions	37.50% 39	35.58% 37	25.00% 26	1.92% 2	104	3.09
metabolite level changes induced by genetic mutations	32.08% 34	52.83% 56	15.09% 16	0.00%	106	3.17
metabolite level changes induced by treatments	32.04% 33	40.78% 42	27.18% 28	0.00%	103	3.05

Q14 Thank you for taking the time to complete this survey. If you have any additional comments or suggestions regarding the curation of data involving chemical compounds, please write them below.

Answered: 5 Skipped: 113