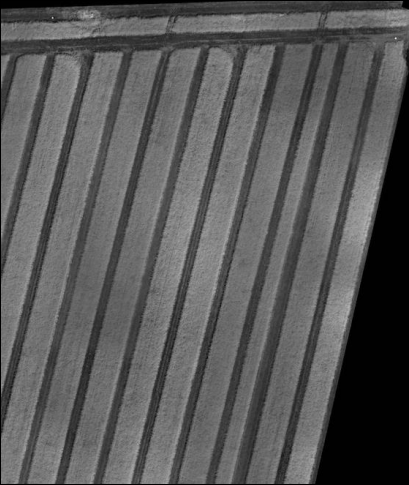


Science-DB

marker	mother_penn_nimbus	father_penn	father_nimbus	mother_hattrick	father_hattrick
Bn-A01-p1001022	G	G	G	G	G
Bn-A01-p10026020	G	G	A	R	A
Bn-A01-p10027328	A	A	G	R	G
Bn-A01-p100441	T	T	T	T	T
Bn-A01-p100693	T	T	T	T	T
Bn-A01-p10105499	T	T	C	Y	C

race	cultivar	level	multiplier	batch	batch_status	storage	harvest_year	booking_date	admission_number	laboratory	examination_date	purity
3955 RAW	RAW	BS	7000347	MR 1404	TMTD gebeizt	3	2013	2013-08-01 00:00:00.000	DE013-1472005	NPZ	2013-08-03 00:00:00.000	0
3955 RAW	RAW	BS	7000347	MR 1404	TMTD gebeizt	3	2013	2013-08-01 00:00:00.000	DE013-1472005	NPZ	2013-08-03 00:00:00.000	0
3955 RAW	RAW	BS	7000347	MR 1404	TMTD gebeizt	3	2013	2013-08-01 00:00:00.000	DE013-1472005	NPZ	2013-08-05 00:00:00.000	99.8
3955 RAW	RAW	BS	7000347	MR 1404	TMTD gebeizt	3	2013	2013-08-01 00:00:00.000	DE013-1472005	NPZ	2013-08-06 00:00:00.000	0

Marker	chr	position
Bn_A01_p1000115	chrA01	617757
Bn_A01_p100441	chrA01	2468965
Bn_A01_p100693	chrA01	2469216
Bn_A01_p101021	chrA01	2469547
Bn_A01_p101094	chrA01	2469620
Bn_A01_p101451	chrA01	2469977
Bn_A01_p10181972	chrA01	8782944
Bn_A01_p101943	chrA01	2470471
Bn_A01_p10231780	chrA01	8828045
Bn_A01_p10249225	chrA01	8852208
Bn_A01_p10250255	chrA01	8853237
Bn_A01_p10251052	chrA01	8854034



• T

•

—

•

—

•

— M

D

-

- T H

- **Science-Db**

- T

-

- D

- D

- D

-

- T

-

- D

• T T

• D D

T

•

•

• T

- T
- D D
-

— T M

— T

— T

— T

Plant

- D

1. `sequelize model:create --name Plant --attributes 'title:string, taxon:string, gmo:boolean'`
2. `sequelize db:migrate`
3. `express_route_gen . --name Plant --attributes 'title:string, taxon:string, gmo:boolean'`

Plant

- D

- ✓ `curl -data
"title=Plant_1&taxon=x&gmo=false"
http:/`

Plant

- - ✓ `curl -X PUT --data "taxon=y"`
`http://www.science.db/plant/1`

- - ✓ `curl -X DELETE`
`http://www.science.db/plant/1`

DT

-

DT

- curl
'http://www.science.db/plants/example_csv'

-

DT

- curl -F "csv_file=@plants_csv.csv"
www.science.db/plants/upload_csv

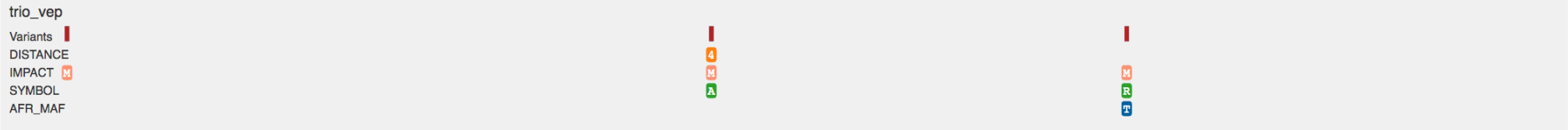
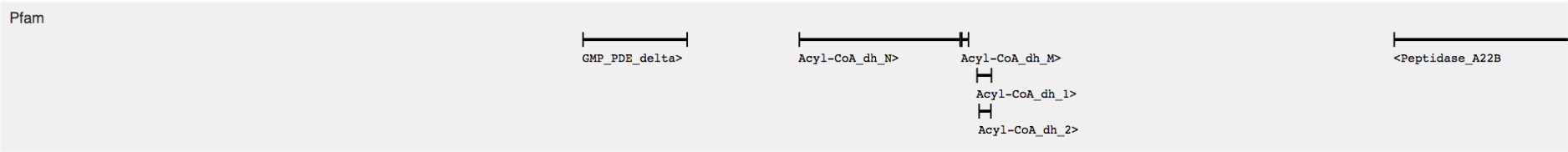
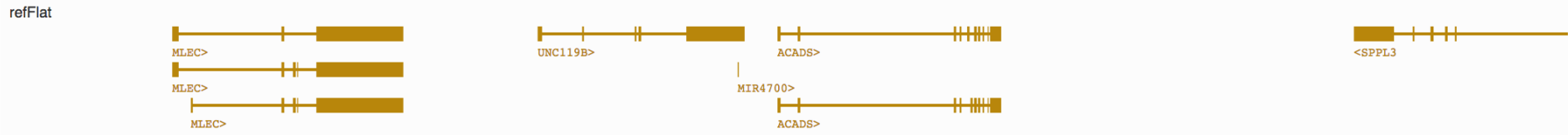
Search for:

name, nickname, or email

Go

Reset

#	<input type="checkbox"/>	Name ^	Shits	Fur_color	Actions
1	<input type="checkbox"/>	Alien	false	Transparant	<div><div></div><div></div><div></div></div>
2	<input type="checkbox"/>	Ghost	false	White	<div><div></div><div></div><div></div></div>
					<div><div></div><div></div><div></div></div>



• T

• H

• T H

• T T

T

•

•

—

—

T

—

```
# Load dependencies
require(httr)

# Login
login.res <- POST('http://213.136.88.239:3030/login',
body=list('email'='m.enders@npz-innovation.de',
'password'='####')
)

# Load all marker data
markers.res <- GET('http://213.136.88.239:3030/markers')

# To obtain the content of the response as a list of
lists, use:
markers.lst <- content(markers.res)
```

```
# Convert to data.frame (table)
Reduce(rbind, lapply( content(markers.res) [1:3],
as.data.frame,
stringsAsFactors=FALSE )) [,1:4]
```

```
# Gives the following tabular output:
id name chromosome position
1 x chr1 12
4 Bn_A01_p1000115 chrA01 617757
5 Bn_A01_p100441 chrA01 2468965
```


T

- T
— H

- H

minimal coding required

—

-

- T

T

•

—

•

D

H