

```
import numpy as np
from mlxtend.plotting import plot_decision_regions
import matplotlib.pyplot as plt
```

```
from sklearn.datasets import load_iris

iris = load_iris()
# data with no heading info - sw, sl, pw, pl, target
iris
```

```
X = iris.data[:, 2]
X = X[:, None]
y = iris.target
```

```
from sklearn.svm import SVC

svm = SVC(kernel='linear', C=0.5)
svm.fit(X, y)

# drawing decision regions
plot_decision_regions(X, y, clf=svm, legend='lower right')
plt.xlabel('pw')
plt.ylim(-1,10)
plt.xlim(0,8)
plt.show()
```

```
from sklearn.datasets import load_iris

iris = load_iris()

XX = iris.data[:, [2,3]]
yy = iris.target
```

```
from sklearn.svm import SVC

svm = SVC(kernel='linear', C=0.5)
svm.fit(XX, yy)

# drawing decision regions
plot_decision_regions(XX, yy, clf=svm, legend='upper right')

plt.xlabel('pw')
plt.ylabel('pl')
plt.title('Drawing decision boundaries/regions')
plt.tight_layout()
plt.show()
```

