

# EXPERIMENT 6

The screenshot shows the Weka Explorer interface with the 'Classify' tab selected. A classifier named 'IBk - K: 3 - W: 0 - A:"weka.core.neighboursearch.LinearNNSearch -A "weka.core.EuclideanDistance -R first-last"' is chosen. The 'Test options' section shows 'Cross-validation' selected with 10 folds. The 'Classifier output' pane displays the following text:

```
==== Run information ====
Scheme: weka.classifiers.lazy.IBk -K 3 -W 0 -A "weka.core.neighboursearch.LinearNNSearch -A "weka.core.EuclideanDistance -R first-last""
Relation: iris
Instances: 150
Attributes: 5
sepalLength
sepalWidth
petalLength
petalWidth
class
Test mode: 10-fold cross-validation

==== Classifier model (full training set) ====
IB1 instance-based classifier
using 3 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

==== Stratified cross-validation ====
==== Summary ====
Correctly Classified Instances 143 95.3333 %
Incorrectly Classified Instances 7 4.6667 %
Kappa statistic 0.93
Mean absolute error 0.04
Root mean squared error 0.1703
Relative absolute error 9.0013 %
Root relative squared error 36.1152 %
Total Number of Instances 150

==== Detailed Accuracy By Class ====
==== Summary ====
Correctly Classified Instances 143 95.3333 %
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==== Detailed Accuracy By Class ====
TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class
1.000 0.000 1.000 1.000 1.000 1.000 1.000 1.000 Iris-setosa
0.940 0.040 0.922 0.940 0.931 0.896 0.963 0.910 Iris-versicolor
0.920 0.030 0.939 0.920 0.929 0.895 0.958 0.919 Iris-virginica
Weighted Avg. 0.953 0.023 0.953 0.953 0.953 0.930 0.974 0.943

==== Confusion Matrix ====
a b c <- classified as
50 0 0 | a = Iris-setosa
0 47 3 | b = Iris-versicolor
0 4 46 | c = Iris-virginica
```

The status bar at the bottom left shows 'Status OK'. On the right side, there are 'Log' and 'x0' buttons.