

The `min_impurity_decrease` parameter is useful to control whether the algorithm continues splitting a branch or decides to conclude it with a leaf node. After measuring the amount of uncertainty decrease in the next state of the algorithm, it only splits if the value is greater than `min_impurity_decrease`. Setting `min_impurity_decrease` to a lower value is more likely to cause overfitting as it may lead the model to learn the unnecessary details or the noise in the data.