**Supervised Land Use Land Cover Classification**

**Purpose:** To create a random forest classifier to identify active aquaculture ponds, dry aquaculture ponds, and other land uses on a Landsat Satellite imagery. We use field observations and high-resolution Sentinel 2 imagery for reference data. This supplementary includes the code used, and the accuracy results of the supervised classification.

**Code**: (Google Earth Engine) - 1\_LULCClassification\_Code.txt

**Hyperparameter tuning:** We use 50 trees based on the following result:

A graph with blue dots and numbers

AI-generated content may be incorrect.

**Accuracy outputs**:

Confusion matrix:

[[75,4,0],[2,41,0],[1,0,44]]

0: [75,4,0]

0: 75

1: 4

2: 0

1: [2,41,0]

0: 2

1: 41

2: 0

2: [1,0,44]

0: 1

1: 0

2: 44

Overall Accuracy:

0.9580838323353293

Producers Accuracy:

List (3 elements)

0: [0.9493670886075949]

1: [0.9534883720930233]

2: [0.9777777777777777]

Consumers Accuracy:

[[0.9615384615384616,0.9111111111111111,1]]

0: [0.9615384615384616,0.9111111111111111,1]

0: 0.9615384615384616

1: 0.9111111111111111

2: 1

Kappa:

0.9343700875814058