

Table 1: Comparison results with other SOTA methods on Atlantic Forest validation dataset under evaluation metrics (%).

Labeled Data	Metric	Validation				
		SusOnly	CCT	PS-MT*	ST(TTA)	Semi-FCMNet
1/16(16)	Precision(NF)	91.90%	66.18%	82.86%	<b>92.48%</b>	90.95%
	Precision(F)	70.74%	33.81%	70.39%	74.60%	<b>76.22%</b>
	Recall(NF)	81.85%	74.99%	85.98%	<b>96.89%</b>	86.75%
	Recall(F)	<b>85.88%</b>	24.99%	65.21%	69.77%	83.10%
	F1-score(NF)	86.58%	70.31%	84.39%	86.29%	<b>88.80%</b>
	F1-score(F)	77.58%	28.74%	67.70%	78.84%	<b>79.51%</b>
1/8(32)	Precision(NF)	89.23%	66.18%	85.28%	89.92%	<b>90.88%</b>
	Precision(F)	75.94%	33.81%	<b>80.23%</b>	76.77%	77.58%
	Recall(NF)	87.14%	74.99%	<b>95.23%</b>	87.50%	87.77%
	Recall(F)	79.42%	24.99%	54.07%	80.82%	<b>82.77%</b>
	F1-score(NF)	88.17%	70.31%	87.09%	88.70%	<b>89.30%</b>
	F1-score(F)	77.64%	28.74%	66.18%	78.74%	<b>80.09%</b>
1/4(63)	Precision(NF)	89.49%	66.18%	84.96	89.74%	<b>90.34%</b>
	Precision(F)	73.98%	33.81%	<b>82.22%</b>	77.82%	78.99%
	Recall(NF)	85.56%	74.99%	<b>97.00%</b>	88.31%	88.94%
	Recall(F)	80.34%	24.99%	58.96%	80.26%	<b>81.39%</b>
	F1-score(NF)	87.48%	70.31%	89.00%	89.02%	<b>89.63%</b>
	F1-score(F)	77.03%	28.74%	71.54%	79.58%	<b>80.17%</b>
1/2(125)	Precision(NF)	91.62%	66.18%	92.43%	<b>93.42%</b>	91.81%
	Precision(F)	72.38%	33.81%	70.83%	73.88%	<b>76.57%</b>
	Recall(NF)	83.41%	74.99%	<b>99.15%</b>	84.02%	86.73%
	Recall(F)	<b>85.07%</b>	24.99%	20.09%	84.62%	84.87%
	F1-score(NF)	87.32%	70.31%	82.63%	88.47%	<b>89.20%</b>
	F1-score(F)	78.22%	28.74%	33.01%	80.49%	<b>80.51%</b>

Table 2: Comparison results with other SOTA methods on Atlantic Forest test dataset under evaluation metrics (%).

Labeled Data	Metric	Test				
		SusOnly	CCT	PS-MT*	ST(TTA)	Semi-FCMNet
1/16(16)	Precision(NF)	<b>91.81%</b>	68.51%	83.56%	89.88%	89.81%
	Precision(F)	69.53%	31.47%	67.87%	73.10%	<b>76.06%</b>
	Recall(NF)	83.11%	74.99%	86.28%	86.68%	<b>88.70%</b>
	Recall(F)	<b>83.87%</b>	24.99%	63.07%	78.76%	78.11%
	F1-score(NF)	87.24%	71.60%	84.90%	88.25%	<b>89.25%</b>
	F1-score(F)	76.03%	27.85%	65.39%	75.82%	<b>77.07%</b>
1/8(32)	Precision(NF)	88.34%	68.51%	87.91%	89.74%	<b>89.77%</b>
	Precision(F)	75.84%	31.47%	77.71%	73.57%	<b>79.81%</b>
	Recall(NF)	89.10%	74.99%	<b>97.52%</b>	87.07%	91.00%
	Recall(F)	74.41%	24.99%	39.13%	<b>78.34%</b>	77.44%
	F1-score(NF)	88.72%	71.60%	86.49%	88.38%	<b>90.38%</b>
	F1-score(F)	75.12%	27.85%	54.15%	75.88%	<b>78.61%</b>
1/4(63)	Precision(NF)	89.02%	68.51%	88.79%	89.75%	<b>89.79%</b>
	Precision(F)	75.33%	31.47%	80.42%	76.57%	<b>81.54%</b>
	Recall(NF)	88.52%	74.99%	<b>97.18%</b>	89.05%	91.96%
	Recall(F)	76.25%	24.99%	48.53%	<b>77.89%</b>	77.26%
	F1-score(NF)	88.77%	71.60%	88.01%	89.40%	<b>90.86%</b>
	F1-score(F)	75.79%	27.85%	62.76%	77.22%	<b>79.34%</b>
1/2(125)	Precision(NF)	90.75%	68.51%	<b>97.68</b>	91.81%	92.15%
	Precision(F)	76.33%	31.47%	72.24%	78.59%	<b>78.63%</b>
	Recall(NF)	88.54%	74.99%	<b>99.81%</b>	89.66%	89.58%
	Recall(F)	80.37%	24.99%	16.53%	82.60%	<b>83.41%</b>
	F1-score(NF)	89.63%	71.60%	83.81%	90.72%	<b>90.85%</b>
	F1-score(F)	78.30%	27.85%	28.27%	80.54%	<b>80.95%</b>

Table 3: Comparison results with other SOTA methods on the Atlantic Forest validation dataset under evaluation metrics (%).

Labeled Data	Metric	Validation				
		SusOnly	CCT	PS-MT*	ST(TTA)	Semi-FCMNet
1/16(16)	Precision(NF)	92.93%	47.81%	<b>95.08%</b>	93.48%	94.73%
	Precision(F)	94.34%	52.19%	65.88%	93.33%	<b>96.84%</b>
	Recall(NF)	93.88%	75.00%	44.66%	92.67%	<b>96.61%</b>
	Recall(F)	93.46%	25.00%	<b>97.88%</b>	94.08%	95.08%
	F1-score(NF)	93.41%	58.39%	60.77%	93.07%	<b>95.66%</b>
	F1-score(F)	93.90%	33.80%	78.75%	93.71%	<b>95.95%</b>
1/8(32)	Precision(NF)	93.12%	47.81%	<b>96.48%</b>	93.86%	94.75%
	Precision(F)	94.04%	52.19%	81.74%	94.63%	<b>96.89%</b>
	Recall(NF)	93.52%	75.00%	76.23%	94.16%	<b>96.67%</b>
	Recall(F)	93.67%	25.00%	<b>97.45%</b>	94.36%	95.09%
	F1-score(NF)	93.32%	58.39%	85.17%	94.01%	<b>95.70%</b>
	F1-score(F)	93.86%	33.80%	88.90%	94.50%	<b>95.98%</b>
1/4(63)	Precision(NF)	93.45%	47.81%	88.13%	93.51%	<b>95.56%</b>
	Precision(F)	96.33%	52.19%	90.16%	95.86%	<b>96.60%</b>
	Recall(NF)	96.10%	75.00%	89.41%	95.57%	<b>96.31%</b>
	Recall(F)	93.83%	25.00%	88.97%	93.92%	<b>95.90%</b>
	F1-score(NF)	94.75%	58.39%	88.77%	94.53%	<b>95.93%</b>
	F1-score(F)	95.06%	33.80%	89.56%	94.88%	<b>96.25%</b>
1/2(125)	Precision(NF)	92.61%	47.81%	87.59%	92.38%	<b>93.96%</b>
	Precision(F)	97.80%	52.19%	94.54%	<b>97.92%</b>	97.35%
	Recall(NF)	97.72%	75.00%	94.46%	<b>97.86%</b>	97.20%
	Recall(F)	92.85%	25.00%	87.74%	92.60%	<b>94.28%</b>
	F1-score(NF)	95.10%	58.39%	90.90%	95.04%	<b>95.56%</b>
	F1-score(F)	95.26%	33.80%	91.01%	95.19%	<b>95.79%</b>

Table 4: Comparison results with other SOTA methods on the Amazon Forest test dataset under evaluation metrics (%).

Labeled Data	Metric	Test				
		SusOnly	CCT	PS-MT*	ST(TTA)	Semi-FCMNet
1/16(16)	Precision(NF)	93.19%	49.80%	<b>96.93%</b>	94.13%	95.61%
	Precision(F)	95.71%	50.20%	65.08%	95.16%	<b>96.76%</b>
	Recall(NF)	95.80%	75.00%	46.71%	95.17%	<b>96.77%</b>
	Recall(F)	93.05%	25.00%	<b>98.53%</b>	94.11%	95.59%
	F1-score(NF)	94.47%	59.86%	63.04%	94.65%	<b>96.18%</b>
	F1-score(F)	94.36%	33.38%	78.38%	94.63%	<b>96.17%</b>
1/8(32)	Precision(NF)	93.13%	49.80%	<b>96.78%</b>	94.37%	95.62%
	Precision(F)	87.62%	50.20%	78.94%	96.01%	<b>96.94%</b>
	Recall(NF)	86.66%	75.00%	73.77%	96.05%	<b>96.96%</b>
	Recall(F)	93.66%	25.00%	<b>97.56%</b>	94.31%	95.59%
	F1-score(NF)	89.78%	59.86%	83.72%	95.20%	<b>96.28%</b>
	F1-score(F)	90.54%	33.38%	87.27%	95.15%	<b>96.26%</b>
1/4(63)	Precision(NF)	93.95%	49.80%	88.06%	94.31%	<b>96.13%</b>
	Precision(F)	96.70%	50.20%	93.94%	<b>96.76%</b>	96.62%
	Recall(NF)	96.77%	75.00%	94.32%	<b>96.82%</b>	96.61%
	Recall(F)	93.81%	25.00%	87.31%	94.21%	<b>96.15%</b>
	F1-score(NF)	95.34%	59.86%	91.08%	95.55%	<b>96.37%</b>
	F1-score(F)	95.23%	33.38%	90.50%	95.47%	<b>96.38%</b>
1/2(125)	Precision(NF)	93.46%	49.80%	86.56%	92.96%	<b>94.72%</b>
	Precision(F)	97.18%	50.20%	95.97%	<b>97.92%</b>	97.13%
	Recall(NF)	97.28%	75.00%	96.40%	<b>98.02%</b>	97.18%
	Recall(F)	93.24%	25.00%	85.16%	92.64%	<b>94.62%</b>
	F1-score(NF)	95.33%	59.86%	91.22%	95.42%	<b>95.93%</b>
	F1-score(F)	95.17%	33.38%	90.24%	95.21%	<b>95.86%</b>