

Content

1.	Abstract.....	4
2.	Introduction	4
3.	Material and methods	8
4.	Results.....	10
4.1.	Marine Achnanthes from French Polynesia (2010–2020 survey).....	10
4.2.	Selected Achnanthes recently described from Polynesia	16
4.3.	New details on two pantropical taxa	24
4.4.	Rare and unnamed tropical taxa.....	24
4.5.	Morphotypes or formae.....	25
4.6.	Ill-defined taxa	26
4.6.1.	<i>Cocconeis placentula</i> Complex	26
4.6.2.	<i>Cocconeis scutellum</i> Complex.....	28
4.6.3.	Loculatae section.....	29
5.	Discussion	30
5.1.	South Pacific assemblages and historical records	30
5.2.	Assemblages from other tropical basins.....	34
5.2.1.	Tropical Indian Ocean.....	34
5.2.2.	West Atlantic (Florida and Caribbean Arc).....	35
5.3.	Marine eukaryote endemism, myth or reality.....	40
5.4.	Role of insularity, position in the SEC and geologic past.....	41
5.5.	Concluding remarks	44
6.	References	45
	Figures 4–30.....	55