

Supplementary Material (SM)

**Prevalence of Microplastics in Coastal Area of Samae San, Thailand
and Its Possible Source**

Siwanath Pangpunth¹, Sujaree Bureekul^{1,*}, Voranop Viyakarn^{1,2}

¹ Department of Marine Science, Faculty of Science, Chulalongkorn University, Bangkok, Thailand

² Aquatic Resources Research, Chulalongkorn University, Bangkok, Thailand

* Corresponding author: sujaree.b@chula.ac.th



(A)



(B)



(C)

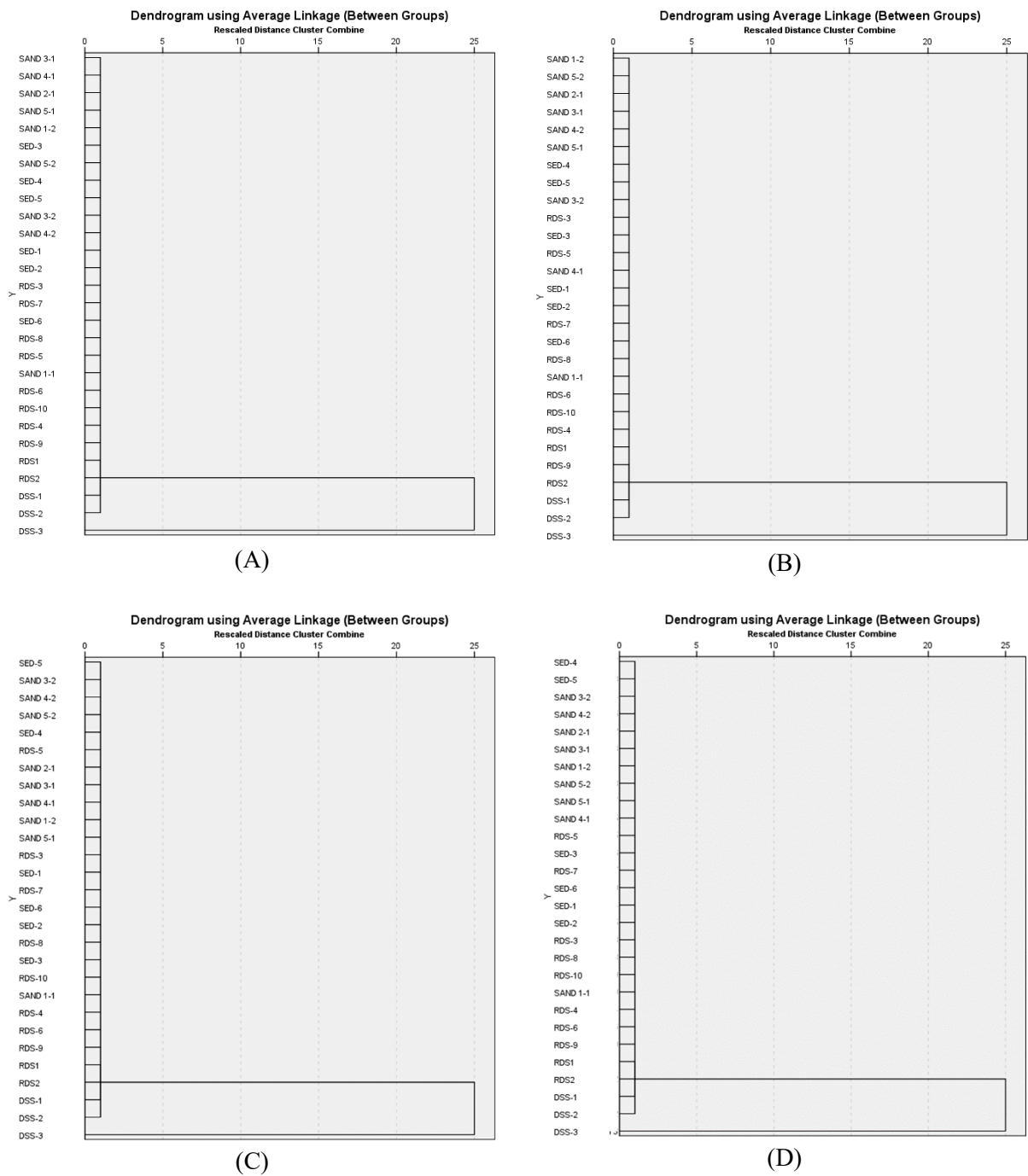
SM1 Samples collections; (A) dumping site and road dust soil collection
(B) beach sand collection and (C) sediment collection.

SM 2 Sampling point information

Sample name	Coordinates	
	Latitude N	Longitude E
Road dust soil (n=10)		
RDS-1	12.630568	100.959303
RDS-2	12.628549	100.959021
RDS-3	12.630574	100.955876
RDS-4	12.627176	100.956894
RDS-5	12.631173	100.960519
RDS-6	12.632106	100.952455
RDS-7	12.625287	100.953069
RDS-8	12.624648	100.962834
RDS-9	12.6035213	100.954839
RDS-10	12.604607	100.956599
Dumping site soil (n=3)		
DSS-1	12.629165	100.959121
DSS-2	12.629207	100.958563
DSS-3	12.629312	100.958348
Sediment (n=6)		
SED-1	12.628736	100.969904
SED-2	12.628652	100.973424
SED-3	12.597357	100.9485
SED-4	12.599095	100.953157
SED-5	12.600957	100.968048
SED-6	12.608933	100.97049
Beach sand (n=9)		
SAND-1	12.629584	100.963305
SAND-2	12.630929	100.963518
SAND-3	12.625304	100.964552
SAND-4	12.61229	100.964744
SAND-5	12.611675	100.96441
SAND-6	12.604577	100.963092
SAND-7	12.60413	100.962711
SAND-8	12.602477	100.954227
SAND-9	12.602505	100.954093

SM 3 Abundance of microplastics in environmental samples

Sample ID	Sample weight analyzed (g dry weight)	Number of particle (items)		Abundance of MPs (items/kg)	Number of polymer types (item in sample weight analyzed)							
		Not plastic	Plastic		PE	PP	PVC	PET	PES	PU	PA	other
Road dust soil												
RDS1	3.02	5	4	1,325	0	1	0	3	0	0	0	0
RDS2	3.08	8	6	1,948	0	0	0	3	0	3	0	0
RDS-3	30.10	2	3	100	0	1	0	1	0	0	1	0
RDS-4	15.11	15	9	596	1	3	0	4	1	0	0	0
RDS-5	30.14	13	4	133	1	0	1	2	0	0	0	0
RDS-6	15.12	2	6	397	0	0	0	6	0	0	0	0
RDS-7	30.08	1	7	233	1	2	0	2	0	0	2	0
RDS-8	20.05	25	6	299	1	2	0	2	0	0	1	0
RDS-9	6.06	9	5	825	3	0	0	2	0	0	0	0
RDS-10	15.07	14	6	398	2	1	1	2	0	0	0	0
Dumping site soil												
DSS-1	3.05	11	16	5,246	5	2	1	1	2	4	1	0
DSS-2	3.10	6	38	12,258	21	0	4	9	1	2	2	0
DSS-3	3.08	23	289	93,831	152	25	5	23	3	75	5	0
Sediment												
SED-1	30.1	2	3	100	0	1	0	1	0	0	1	0
SED-2	30.15	5	1	67	0	2	0	0	0	0	0	0
SED-3	30.17	2	3	100	0	0	0	0	0	0	3	0
SED-4	30.1	3	1	33	2	0	0	1	0	0	0	0
SED-5	30.13	1	1	33	1	0	0	0	0	0	0	0
SED-6	30.07	2	5	166	1	1	0	2	0	0	1	0
Beach sand												
SAND-1	30.07	0	9	299	1	5	0	0	0	0	3	0
SAND-2	30.04	2	3	100	0	1	0	1	0	0	1	0
SAND-3	60.15	6	5	83	1	0	0	3	0	0	1	0
SAND-4	30.07	1	3	100	1	0	0	1	0	0	1	0
SAND-5	30.10	2	1	33	0	0	0	0	0	0	1	0
SAND-6	30.06	2	3	100	0	0	0	2	0	0	1	0
SAND-7	30.03	2	1	33	0	1	0	0	0	0	0	0
SAND-8	30.06	5	3	100	1	2	0	0	0	0	0	0
SAND-9	30.04	1	2	67	0	1	0	0	0	0	1	0



SM 4 Dendrogram from cluster analysis classified by (A) shape (B) color (C) polymer and (D) all factors.