

Table 4 Average of *n*-alkanes concentrations ($\mu\text{g g}^{-1}$) and standard error of the soil of Basrah city during the study period

Carbon chain	Al-Shia bah	ES	Al-Faw	ES	Kor-Al-Zubair	ES	Center of Basrah	ES	Al-burj sia	ES	Al-Ru mella	ES	Um-Qasir	ES
C ₁₁	0.731	0.6	0.479	1.4	0.421	0.4	0.441	1.3	0.631	0.1	0.893	1.7	0.432	0.5
C ₁₂	0.241	0.4	0.125	0.3	0.158	0.8	0.122	1.6	0.242	0.3	0.318	0.3	0.113	0.4
C ₁₃	0.650	1.5	0.532	0.5	0.654	0.9	0.502	0.5	0.535	0.4	0.792	0.4	0.342	0.6
C ₁₄	1.370	0.3	0.880	0.5	0.962	0.2	0.928	0.7	1.340	0.2	1.488	0.5	0.815	0.7
C ₁₅	0.894	1.2	0.482	0.8	0.524	1.0	0.427	0.3	0.601	0.4	0.866	0.4	0.551	0.7
C ₁₆	1.562	0.7	0.947	0.2	0.932	1.3	0.875	0.5	1.141	0.3	1.610	0.2	0.816	0.2
C ₁₇	0.723	0.5	0.590	0.4	0.337	1.8	0.510	0.8	0.626	0.5	0.741	0.5	0.421	1.5
C ₁₈	1.382	0.9	0.873	0.9	0.967	0.7	0.961	0.9	1.472	1.3	1.516	0.1	0.821	1.7
C ₁₉	0.703	0.9	0.493	1.0	0.552	0.6	0.410	0.1	0.722	1.5	0.885	0.1	0.364	1.0
C ₂₀	1.232	1.0	0.861	1.3	0.882	0.4	0.861	0.2	1.313	1.3	1.572	0.6	0.852	0.4
C ₂₁	0.741	0.1	0.542	1.7	0.565	0.2	0.415	0.5	0.625	0.6	0.843	0.4	0.345	0.3
C ₂₂	1.435	0.1	0.911	1.7	0.998	0.1	0.829	1.4	1.072	0.6	1.636	1.3	0.862	0.6
C ₂₃	0.893	0.3	0.580	0.4	0.598	0.3	0.552	1.4	0.717	0.4	0.840	1.0	0.320	0.8
C ₂₄	1.690	0.2	0.851	0.8	0.924	0.2	0.884	1.4	1.251	0.8	1.513	0.5	0.820	0.5
C ₂₅	0.882	1.0	0.460	0.1	0.540	1.5	0.430	0.5	0.721	0.5	0.899	0.7	0.576	0.9
C ₂₆	0.237	0.6	0.148	0.1	0.176	1.6	0.115	0.5	0.111	0.3	0.362	0.8	0.159	1.0
C ₂₇	0.812	0.5	0.561	0.1	0.631	0.6	0.421	0.7	0.725	0.2	0.868	0.9	0.462	0.1
C ₂₈	0.234	0.6	0.171	0.2	0.112	0.4	0.139	0.9	0.229	0.1	0.241	0.9	0.124	0.3
C ₂₉	0.782	0.8	0.442	0.6	0.513	0.2	0.564	0.7	0.622	1.0	0.852	0.4	0.412	0.3
C ₃₀	0.246	0.5	0.213	0.8	0.143	0.3	0.182	0.8	0.202	1.3	0.373	0.6	0.196	0.5
C ₃₁	0.615	0.3	0.498	0.4	0.661	0.5	0.421	0.3	0.523	0.4	0.761	0.5	0.442	1.5
C ₃₂	0.179	0.2	0.133	0.6	0.132	1.6	0.131	0.2	0.101	0.5	0.352	0.3	0.081	1.7
C ₃₃	0.730	0.1	0.595	0.7	0.541	0.1	0.524	0.4	0.767	0.6	0.793	0.2	0.522	0.3
C ₃₄	0.253	1.6	0.141	0.7	0.153	0.7	0.162	0.3	0.161	1.4	0.252	0.5	0.032	0.1
Total	19.217		12.508		13.076		11.806		16.45		21.266		10.88	