

非  
分别  
量、产甲  
降低了土  
力、甲烷氧化  
提高了滩涂湿地  
滩涂湿地的 CH<sub>4</sub>排

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( Scho of Life Sci Taizhou University Taizhou

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(China)

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rom 0  
CH<sub>4</sub>  
l mix  
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*Spartina alte*  
invasive le  
nity ,  
iflo

温  
污染物( O<sub>2</sub>, CO, CO<sub>2</sub> ) 天然

注,其 CH<sub>4</sub>

有明  
间的  
高了  
等<sup>[17]</sup>  
CH<sub>4</sub>  
者,而  
成CO  
的土  
菌是  
、互

滩涂湿地选择  
于三门县小雄镇、临  
。根据互花米草的入侵  
分别设置3个不同入侵梯  
样地(Nat)、互花米草与本土  
以及互花米草单优群落样地

植物  
(Mon  
风性  
1200  
>9

每个样

候

1

<9

2.00

1.80

1.60

芦苇

互花米草

*ruiflora*

mixed with *S. alterniflora*

土壤微生物学

第 1 章

CH<sub>4</sub> 测定  
-12A  
测. 色  
气为载  
的 35  
in<sup>-1</sup>,  
浓度.  
量.  
潜力  
的方法  
N

取 5 g 鲜土于 45  
下,于摇床中  
种种液  
10<sup>-2</sup>  
玻

表  
量. 产  
中的 CH<sub>4</sub>  
氧化潜力的测定  
N 法<sup>[24]</sup>. 培养基采  
基 (pH 6.8) 含: 1.0 g  
O<sub>3</sub>、0.717 g Na<sub>2</sub>HPO<sub>4</sub> ·  
O<sub>4</sub>、0.2 g CaCl<sub>2</sub> · 2H<sub>2</sub>O、0.005  
量元素溶液<sup>[21]</sup>. 测定方法为: 称

数量

士旦  
法-稀释热法.

17/7K H<sub>2</sub>SO<sub>4</sub>-HClO<sub>4</sub> 液

并加 抽具

量采用烘干法测定,将采集到的植物样品于 105 °C 干燥箱中杀青 30 min,70 °C 烘干至恒量,称干质量,最后换算成  $g \cdot m^{-2}$ 。

#### ;<M 数据处理

采用 SPSS 16.0 软件对数据进行统计分析,入侵梯度之间的数据比较采用单因素方差分析( one-way ANOVA),并采用最小显著差异法( LSD) 进行显著性检验(  $\alpha=0.05$ )。应用 SPSS 16.0 中的 Correlate 进行

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植  
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中  
土

二  
三  
四  
五  
六  
七  
八  
九  
十  
十  
一  
十  
二

仅具  
侵梯度  
且不  
 $1x+3.54$   
 $5, P=0.0$

值  
趋势,  
1~6.63,  
碱性,pH值为  
磷含量随着互花  
但变化不显著.

复样地 CH<sub>4</sub> 排放通量与  
甲烷菌数量、产甲烷潜力、  
甲烷氧化潜力均呈显著正相关,

相关系数分别为 0.686、0.669、0.794、0.857、0.807、  
0.834 与土壤含  
CH<sub>4</sub> 排放通

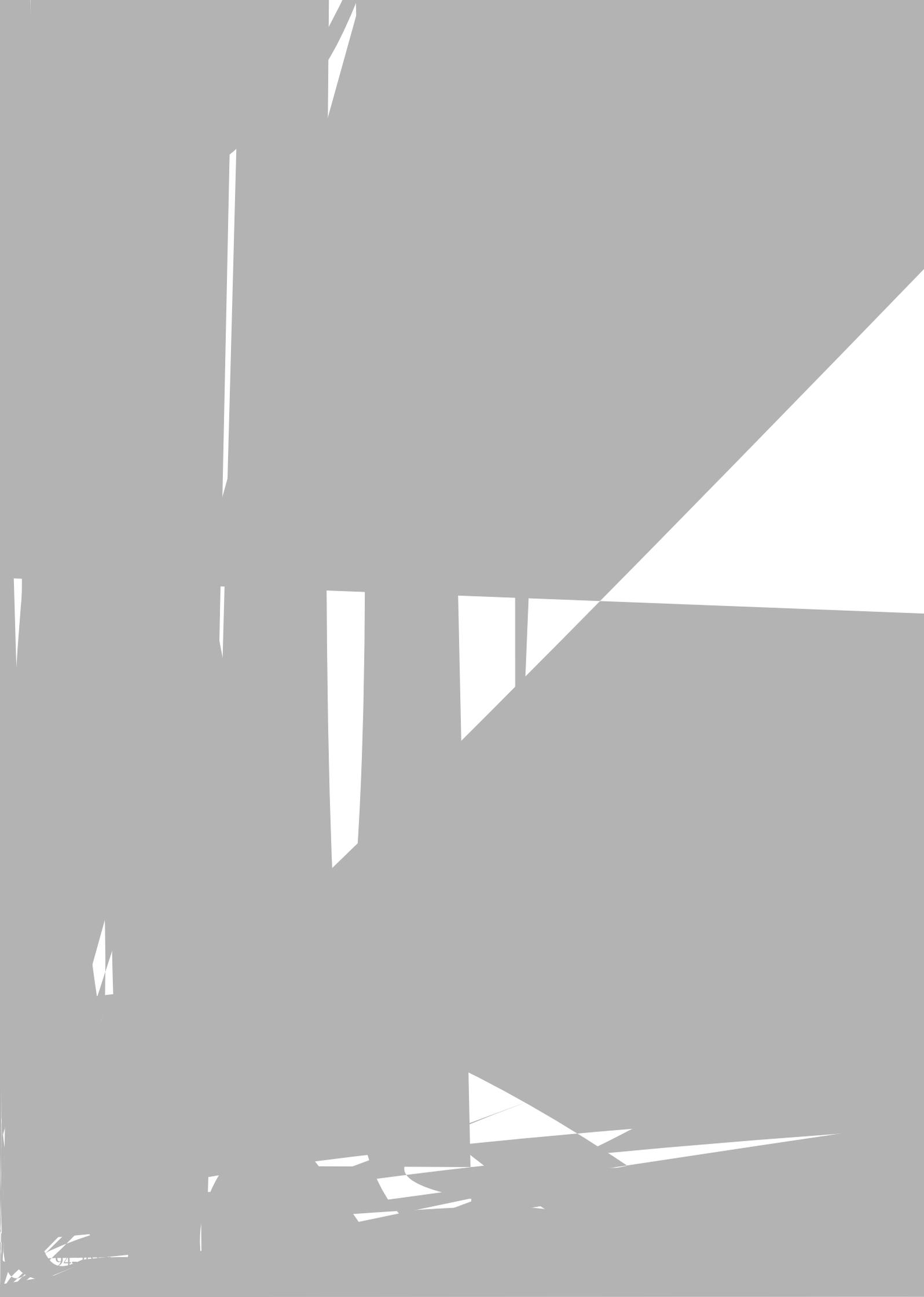
2.0

CH<sub>4</sub> 排  
Yuan 等<sup>[27]</sup>  
光基

平苗产

表 11

在本研究田



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