# 海涂泥质盐碱地不同果桑品种生长适应性分析

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摘 要:【目的】研究海涂盐碱地不同品种果桑的生长适应性指标，确定各品种的相对耐盐力。为适用于浙江滨海盐碱地经济资源开发与利用提供参考。【方法】以河北红、强桑 3 号、红果 2 号、红果 3 号、72c002、果选 3 号、果选 2 号、大 10、琼 46、A18、金蔷 63 和桂花蜜，共 12 个果桑品种为研究对象，采用随机取样的方法，在温州海涂泥质盐碱地和浙江省农业科学院果桑资源圃两处样地，对其植株成活率、果实农艺性状（果长、果径、单果重和可溶性固形物含量）和土壤理化性质等几个耐盐性适应性指标上进行比较分析【结果】1）不同果桑品种的成活率差异大，其中河北红、果选 3 号和 72C002 的成活率最高，超过 80%，而琼 46 和金蔷 63 成活率偏低，低于 30%；2）A18 果实中的可溶性固形物含量显著高于其他品种，在盐碱地和资源圃中分别达到31.26 %和30.18 %，而其他品种的可溶性固形物含量为7.50 %～17.33 %；3）与种植前相比，12 种果桑品种均可明显改善滨海盐碱地的理化性质，主要表现为土壤 pH 值下降、含盐量减小，并且随着改良时间的增加，各土层土壤含盐量明显降低，但短期内深层土壤改良效果不显著；4）河北红、强桑 3 号和果选 3 号的生长表现和土壤脱盐能力一致，即成活率较高的树种，受盐害程度小。【结论】通过滨海盐碱地不同果桑品种的农艺指标及耐盐适应性指标的评价，适宜海涂围垦区种植的果桑品种为河北红、强桑 3 号和果选 3 号。

关键词：果桑；盐碱地；适应性

# Analysis of growth adaptability of different fruit mulberry varieties in the coastal saline-alkali land

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**Abstract:** 【Objective】 To study the growth adaptability indexes of different varieties of mulberry in the saline-alkali land of sea mud, and to determine the relative salt tolerance of each cultivar. It provides a reference for

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the development and utilization of economic resources in the coastal saline-alkali land of Zhejiang. 【Methods】 A total of 12 mulberry varieties, including Hebeihong, Qiangsang 3, Hongguo 2, Hongguo 3, 72C002, Guoxuan 3, Guoxuan 2, Da 10, Qiong 46, A18, Jinqiang 63 and Guihuami, were taken as the research objects, and several salt tolerance adaptability indexes, such as plant survival rate, fruit agronomic traits (fruit length, fruit diameter, single fruit weight and soluble solids content) and soil physicochemical properties, were compared and analyzed in two plots of Wenzhou Haitu muddy saline land and Zhejiang Academy of Agricultural Sciences mulberry resource garden【Results】1) The survival rate of different mulberry varieties varied greatly, among which Hebeihong, Guoxuan 3 and 72C002 had higher survival rate, more than 80%, while the survival rate of Qiong 46 and Jinqiang 63 was lower, less than 30%; 2) The soluble solids content in A18 mulberry was significantly higher than that of other varieties, reaching 31.26% and 30.18% in coastal saline land and resource gardens, respectively, while the soluble solids content of other varieties was 7.50% ~ 17.33%. 3) Compared with before planting, the 12 mulberry varieties could significantly improve the physical and chemical properties of coastal saline-alkali land, mainly manifested as a decrease in soil pH value and salt content, and with the increase of improvement time, the soil salinity content of each soil layer decreased significantly, but the effect of deep soil improvement was not significant in the short term; 4) The growth performance of Hebeihong, Qiangsang 3 and Guoxuan 3 was consistent with the soil desalination capacity, that is, the tree species with higher survival rate were less damaged by salinity. 【Conclusion】 Through the evaluation of agronomic indexes and salt tolerance adaptability indicators of different mulberry varieties in coastal saline-alkali land, the mulberry varieties suitable for planting in the sea mud reclamation area were Hebeihong, Qiangsang 3 and Guoxuan 3.

**Keywords:** mulberry; saline land; adaptability