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## Progress of Research on Submergence Tolerant Grass Species

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## Progress of research on submergence tolerant grass species

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**Key words** : submergence tolerance, levee and beach greening, forage

**Introduction** According to the statistics during the years 1949-1991 the disaster areas cause by flooding and waterlogging in our country with an average of  $73 \times 10^6$  hm<sup>2</sup>, the damage areas are  $43 \times 10^6$  hm<sup>2</sup> (Hu Tiantian 2005). Southern China abounds in freshwater resources, has adequate of solar and temperature resources and has plenty of wetland areas for grass growing. We can use these advantageous conditions to explore and research new submergence tolerant grass species. This research has strategic and practical significance (Li Keyun, 1993).

**Materials and methods** The first stage is selecting elite wild submergence tolerant grass species. Transgenic technology will be used to transfer beneficial traits from the wild species to develop improved submergence tolerant cultivars. Through the research we can save a huge amount of capital and increasing the farmers' income from lake areas by planting high-yield and good quality grass. After the research we can put forward new evaluation criterion for further study.

**Results and discussion** The occurrence of water logging is a common and disturbing incident worldwide. For the practical benefit of our country, my experiences of many years suggest that we should launch the research into the following aspects: ① increasing the input in screening for tolerant grass and rank it as major special subject research, with strong support ② studies on the importance of making town and scenic belts green, screening of excellent lawn seed which has submergence tolerance, anti-pollution, maintaining the soil, researching about planting, conserving and managing. ③ studies on accelerating planting of excellent forage grass which has submergence tolerance, maintain soil, effect on conserving the embankment, high yield, good quality and comprehensive utilization for feeding livestock or fish. ④ studies on screening of submergence tolerant seed on the beaches of reservoirs and testing their use to feed fish and deposit silts (Li Keyun, 1990).

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