

Potential of Giant Grasses to Grow in Cold, Dry and Saline Conditions as Energy Sources

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Miscanthus

Miscanthus sacharilorius

Triarrhena lutarioriparia

T. sacchariflora

M. sinensis

M. x giganteus

Arundo donax

Yuncheng China

(35.02° N. lat) -14°C

Braunschweig Germany

(52.16° N. lat) -21°C

Beijing

(39.55° N. lat) -16°C

Dongying

(37.27° N. lat) -19°C

- Yuncheng China pH 8.1

(35.02° N. lat)

Braunschweig Germany pH 5.6

(52.16° N. lat)

Beijing

(39.55° N. lat) pH 7.7

Dongying

(37.27° N. lat) pH 8.5

soil salt content 1%

Natural Vegetation of Giant Grasses



Natural vegetation of
Triarrhena lutarioriparia



Natural vegetation of
Triarrhena sacchariflora



Natural vegetation of
Miscanthus sinensis

Transplantation Trials



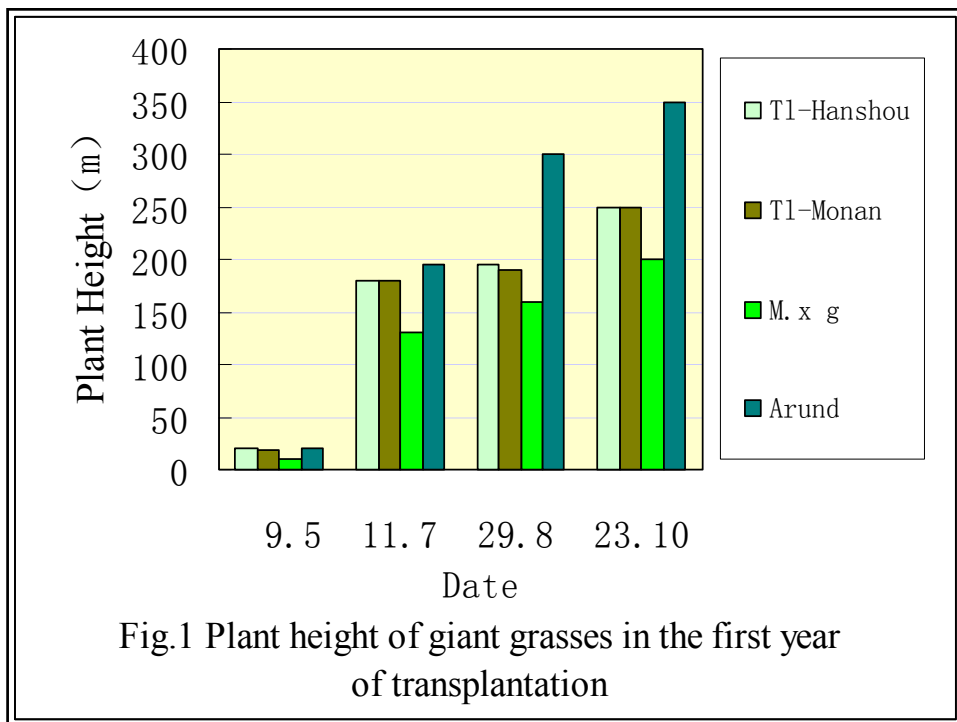
T. lutarioriparia – Hanshou (11.07.2002)



T. lutarioriparia – Monan(11.07.2002)



T. lutarioriparia – Hanshou(29.08.2002)



T. lutarioriparia in the
The Halophyte Garden (Soil salt 1%) (20.11.2002)

The second Year after Transplantation



T. lutarioriparia in the
The Halophyte Garden (Soil salt 1%) (21.09.2003)



M.x giganteus & T.lutarioriparia Monan
(28.06.2003)



T.lutarioriparia Hanshou & Monan
(05.07.2003)



Giant grasses in dry soils
(05.09.2003)



Giant grasses in dry soils
(05.09.2003)



Giant grasses in dry soils
(08.09.2003)



Giant grasses in dry soils
(08.09.2003)



T.lutarioriparia & *M.x giganteus* (10.09.2003)



Arundo donax (03.07.2003)



Arundo donax in saline soils
(12.07.2003)



Arundo donax (08.09.2003)
(Planted in Autumn 2002)



Arundo donax (11.08.2003)
(Planted in Spring 2003)

Environmental Aspects of Giant Grasses



Chicken under Giant grasses



Chicken under Giant grasses

Macropropagation of Giant Grasses



Giant grass: Culm propagation (08.08.2003)



Sprouts from culms of *T.lutarioriparia* (08.08.2003)

Our Research Station



Our Research Station



Giant grass for Gardening (05.08.2003)



Giant grass for Gardening (05.08.2003)



Our Research Station (08.09.2003)



Our Research Station (08.09.2003)



Our Research Station (08.09.2003)



Various Grasses (11.09.2003)



Our Research Station



Our Research Station

Giant Grasses as Water Plants for Gardening



T.lutarioriparia in water





Other Grasses



Pennisetum alopecuroides (11.07.2003)



Pennisetum alopecuroides (11.08.2003)



M.x giganteus, *T.lutarioriparia*
with *Leymus chinensis* in front (28.08.2003)



M.x giganteus & *T.lutarioriparia*
with *Leymus chinensis* in front (08.09.2003)





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