

蘭陽分場

Lanyang Branch Station



蘭陽分場業務為針對宜蘭地區主要園藝作物，進行品種選育及栽培技術改良，以期達成農產品之多樣化、提高品質、產期調節及降低生產成本、拓展銷路之目標。

蔬菜作物部份，選育耐熱品種番茄花蓮亞蔬5號及富含 β -胡蘿蔔素之花蓮亞蔬13號，育成高產優質的青蔥品種蘭陽1號及耐熱青蔥品種福蔥-蘭陽3號，並建立青蔥無病毒健康種苗組織培養繁殖體系，可提高產量達25%；開發青蔥種原鑑定技術。加強研發小白菜等短期葉菜類蔬菜之穴盤栽培技術，解決災害後市場部份供需問題。研發直立式支柱栽培洋香瓜及哈密瓜，可提升產量及品質；並開發水茼蒿、紅梗蕹菜等水生植物成為新興蔬菜。

花卉方面，育成花苞大粒且色彩紅豔的銀柳品種蘭陽1號，並研發採收後處理及花苞染色技術，可展現銀柳多種風貌，提升外銷潛力。研發寒梅花期調節技術，提升寒梅經濟栽培價值。蒐集及開發原生植物如普拉特草、越橘葉蔓榕、金石榴、倒地蜈蚣、台灣金絲桃等，成為具有商品價值之觀賞植物；成功將水生植物虎耳、象耳及日本紙莎草等開發成為中小型盆栽。金花石蒜為宜蘭之原生球根花卉，因採擷殆盡，自民國86年於宜蘭地區進行復育，復育區域涵蓋南澳鄉、大同鄉、冬山鄉、蘇澳鎮、羅東鎮及東北角等，已完成復育工作。

果樹方面，積極輔導三星地區寄接梨石蠟嫁接生產技術及其品牌「上將梨」之建立，及引進適合平地栽培之低需冷性水蜜桃品種台農甜蜜桃，並選出佛利蒙柑等具豐產、早熟、高品質之優良柑桔品種，推廣給農民栽培，顯著提高農民收益。建立金柑無病毒健康種苗生產體系、肥培管理及病蟲害綜合防治技術，使本區特有的金柑產業永續發展，提升產業競爭力。



耐熱青蔥新品種福蔥—蘭陽3號

A new green onion variety Futsun Lanyang 3 is heat-tolerant.



番茄花蓮亞蔬5號，適合夏季栽培

New tomato variety Hualien Asveg 5 is suitable for summer cultivation.

The main activities of the Lanyang Branch Station are to improve the cultivation techniques and varieties of major horticultural crops grown in Yilan County. Our researches are aimed to diversify the agricultural products, to enhance quality, to adjust the harvest season, and to lower the production cost, so as to improve the overall agricultural industry in local area.

Vegetables are the most important economic crops in Yilan. Our scientists have bred two tomato varieties, i.e., Hualien Asveg No. 5 which is heat-tolerant and Hualien Asveg No. 13 which is high in β -carotene content. Yilan is the major green onion production area in Taiwan. We have bred and released two green onion varieties, Lanyang 1 and Futsun-Lanyang 3, both are high yielding and heat tolerant. A cultivation system to produce virus-free seedlings has also been developed by using the techniques of tissue culture which is able to increase green onion yield up to 25%. The development of a plug-tray culture method is ideal for the production of short-term vegetables such as Chinese cabbage. Both the yield and quality of the vegetables can be significantly increased. In addition, we have introduced a number of vegetables of high economic value, e.g., water cress and red stalk water spinach, which are new to Yilan area.

For flower crops, we have bred a cat-tail willow variety Lanyang No. 1 with large and beautiful red color flower buds. Techniques of post-harvest treatment for longer shelf life and staining for multi-color flower buds have also been



組織培養獲得之無病毒青蔥健康種苗

Healthy and virus-free seedlings of green onion obtained by tissue culture.

青蔥蘭陽1號產量高、蔥白長、品質優良

Green onion variety Lanyang 1 is characterized by high yielding, long blanched stem, and superior quality.



developed. Flower quince is another new crop. Its economic value has been increased greatly by the cultural improvement to adjust the flowering season. The collection of native flower species such as pratia (*Pratia nummularia*), *Ficus vaccinioides*, common melastoma (*Bredia oldhamii* Hooker f.), formosan torenia (*Torenia concolor* Lindley var. *formosana* Yamazaki), *Hypericum formosanum*, is valuable in developing new crops for economic production and varietal improvement. Many aquatic plant species, including blue waterhyssop (*Bacopa carolineana*), creeping burhead (*Echinodorus cordifolius*), dwarf papyrus (*Cyperus haspan*), have been successfully cultured for ornamental use. *Lycoris aurea* is a once endangered native herb with bulbous roots and possesses potential as an ornamental plant. We initiated a recovery project of this herb in 1977 with great success. This plant is not being grown widely in the townships of Nan-ao, Datong, Dongshan, Su-ao, Luodong and along the northeast coastline of Taiwan.

For researches on fruit trees, the application of paraffin-grafting technique has increased the yield of "General's Pear". The introduction of Tainung sweet peach into Yilan County enables the production of peach in the plain area due to the low chilling requirement of the variety. Fremont tangerine, characterized by its high yield, superior quality and early maturity, has also been recommended to the farmers for production. Kumquat has been a traditional citrus crop in Yilan area for hundreds of years. Our scientists have developed the tissue-culture technique to produce healthy and virus-free seedling to enhance both the yield and quality. This, along with the improved fertilization management and integrated pest control measures, increases markedly the competitiveness and hence allows the sustainable development of this important fruit crop.



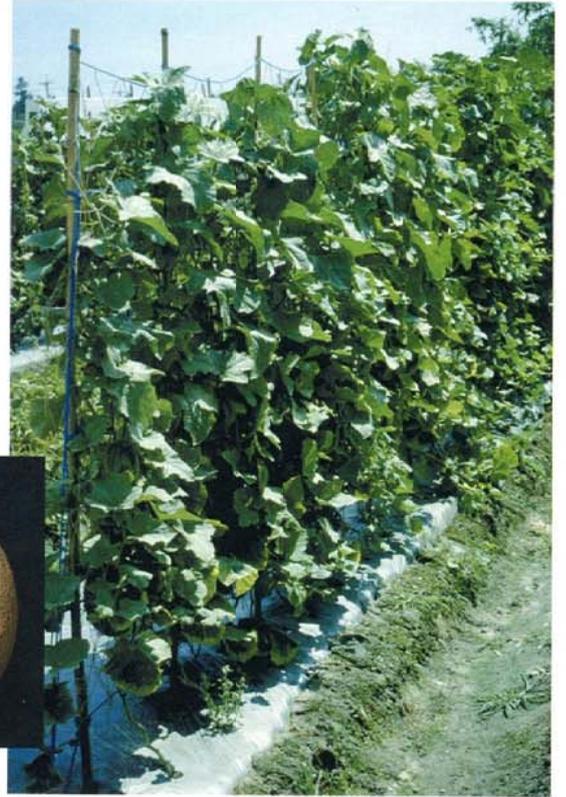
桔黃色小果番茄新品種花蓮亞蔬13號，富含β胡蘿蔔素
The new variety of orange yellow cherry tomato Hualien Asveg No.13 is rich in β-carotene.



有機葉菜類穴盤栽培生育情形
Using plug tray for the organic culture of leafy vegetables.



發展水茼蒿成為新興水生蔬菜
Developing water cress as a
new aquatic-cultured vegetable.



洋香瓜直立式支柱栽培，可提高產量及品質
Cultivating muskmelon with vertical
pillar can increase yield and quality.



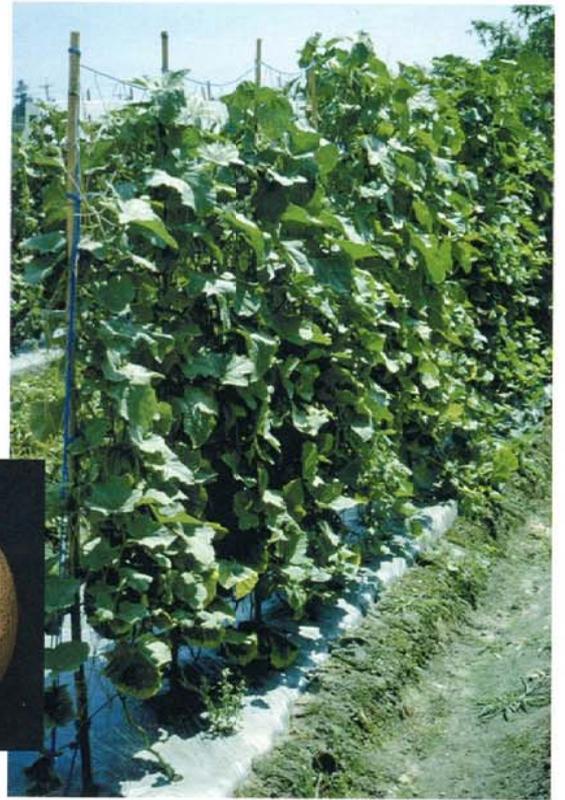
銀柳新品種「蘭陽一號」花苞大，色澤鮮豔
The new variety of cat-tail willow, Lan-yang 1, has large and colorful flower buds.

開發高貴典雅之銀柳切枝應用於花藝
Develop elegant cat-tail willows to be
applied in cut-flower arrangement.





發展水茼蒿成為新興水生蔬菜
Developing water cress as a new aquatic-cultured vegetable.



洋香瓜直立式支柱栽培，可提高產量及品質
Cultivating muskmelon with vertical pillar can increase yield and quality.



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藝術化之裸根栽培，古典雅緻
The artistic and classical cultivation of bare roots.



花期調節技術，開啟寒梅經濟栽培時代
Developing techniques to adjust the timing of flowering contributes to the economic production of flowering quince.



日本紙莎草具有優雅的株型
Dwarf papyrus (*Cyperus haspan*) with elegant stem shape and appearance.



平地高接「上將梨」甜度高，品質好
“General's pear” is high in sweetness and table quality.



水生植物點綴小庭園有畫龍點睛的效果
Crucial effects produced by decorating small gardens with aquatic plants.



甜蜜桃利用棚架栽培，結實纍纍
Abundant fruiting of sweet peach under canopy rack culture.