國立中興大學 108 學年度園藝學系碩士班甄試招生考試試題

科　目：園藝學　　考試時間：120 分鐘

(答案請寫在試題紙上，請註明題號，不用抄題目)　　(本試題紙：1 頁)

一、今有一果園發生疑似生理障礙(非生物性病害)，試說明診斷流程，如何確定為生理障礙？並說明生理病害分為幾類？ (10 分)

二、近年來市面上出現很多日本進口售價很高之無籽葡萄，試說明其是利用何種技術生產。(10 分)

三、試扼要解釋下列果樹之專有名詞？(每小題 2.5 分，共 10 分)

1. Central leader
2. Stenospermocarpy
3. Dichogamy
4. Pollination constant and non-astringent)

四、試說明南投埔里之茭白筍栽培時夜間光照的原因及目的為何。(10 分)

五、試說明青蔥、馬鈴薯、蘿蔔、蘆筍等蔬菜栽培進行培土之目的及方法。(10 分)

六、試說明下列名詞之意涵。(每小題 2 分，共 10 分)

1. Tip burn　　2. Mulch　　3. Crop rotation
4. Field capacity of soil　　5. Electrical conductivity value of soil

七、試寫出下列花卉作物的英名、屬名及原生地。(每小題 2 分，共 10 分)

1. 蝴蝶蘭　　2. 非洲鳳仙花　　3. 百合
4. 菊花　　5. 聖誕紅

八、試說明以下花卉市場交易方式及價格穩定度之差異性。例如彰化田尾：產地型批發、價格固定。(每小題 2 分，共 10 分)

1. 丹麥　　2. 荷蘭　　3. 美國
4. 日本　　5. 台北花市

九、試說明玫瑰花修剪之目的及撚枝栽培(Bending Culture)技術之原理(每小題 2 分，共 10 分)

十、試將下列英文翻譯成中文。(10 分)

Chili pepper (*Capsicum annuum*) is an important horticultural crop grown throughout the world. Agronomically important traits have been introduced into the chili pepper by conventional breeding, but the application is currently limited by the lack of genetic resources or sexual incompatibility among different species. Nowadays, genetic transformation of the plant has become an important alternative for both basic and commercial plant breeding programs. However, chili pepper is considered to be a highly recalcitrant species with respect to *in vitro* regeneration and genetic transformation. In the present study, we describe a protocol for the successful isolation of mature living sperm, egg, synergid, and central cells from chili pepper. Our protocol provides a basis from which to perform *in vitro* fertilization of chili pepper and molecular biological studies of the fertilization process, and opens up a great potency for chili pepper breeding to create excellent varieties.