

APPENDICES

Murashige and Skoog (MS) media**Table 12** Ingredients of Murashige and Skoog (MS) media

Chemical reagents	Concentration (mg/l)
Macronutrients	
NH ₄ NO ₃	1,650
KNO ₃	1,900
CaCl ₂ .2H ₂ O	440
MgSO ₄	370
KH ₂ PO ₄	170
Micronutrients	
H ₃ BO ₃	6.20
MnSO ₄ .H ₂ O	6.90
ZnSO ₄ .H ₂ O	6.14
KI	0.83
Na ₂ MoO ₄ .H ₂ O	0.25
CuSO ₄ .5H ₂ O	0.025
CoCl ₂ .6H ₂ O	0.025
Irons	
Sodium EDTA	37.25
FeSO ₄ .7H ₂ O	27.85
Organic components	
Glycine	2.0
Nicotinic acid	0.5
Pyridoxine	0.5
Thiamine	0.1
Sucrose	30 (g/l)
Adjust Ph to 5.5	

(Murashige and Skoog, 1962)

Elicitors preparationN-(2-chloro - 4- pyridyl)-N- phenylurea (CPPU) stock 1mg/ml

- 1 mg CPPU was dissolved in 1 ml DMSO

Thidiazuron (TDZ) stock 1 mg/ml

- 1 mg TDZ was dissolved in 1 ml absolute ethanol

Abcisic acids (ABA) stock 2 mg/ml

- 2 mg ABA was dissolved in 1 ml absolute ethanol

RESEARCH PUBLICATIONS

1. **Udomsin, O.**, and Putalun, W. (2010). Improvement of isoflavonoid production by abscisic acid in hairy root culture of *Pueraria candollei* var *candollei*. **The 9th NRCT-JSPS Joint Seminar Natural Medicine Research for the Next Decade: New Challenges and Future Collaboration.** 6-8 December, Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand.
2. Yusakul, G., Putalun, W., **Udomsin, O.**, Juengwatanatrakul, T., and Chaichantipyuth, C. (2011). Comparative analysis of the chemical constituents of two varieties of *Pueraria candollei*. **Fitoterapia.**, **82**, 203-207.
3. **Udomsin, O.**, Udomsuk, L., and Putalun, W. (2011). Improvement of isoflavonoid production by ABA and TDZ in hairy Root culture of *Pueraria candollei* var. *mirifica* and *Pueraria candollei* var. *candollei*. **The 8th AFMC International Medicinal Chemistry Symposium: Frontier of Medicinal Science.** 29 November – 2 December, Keio Plaza Hotel, Tokyo, Japan.
4. **Udomsin, O.**, Juengwatanatrakul, T., and Putalun, W. (2012). Effect of elicitors on chromene and total isoflavonoid accumulation in *P. candollei* var. *mirifica*. hairy root culture. **The 4th Annual Northeast Pharmacy Research Conference of 2012: Pharmacy Professional in Harmony.** 11-12 February, Faculty of Pharmaceutical Sciences, Khon Kaen University, Thailand.