

## F-F1-15

### Effect of Deep Sea Water Priming and Raising Seedlings Treatments on Germination and Raising Seedlings of *Brassica campestris* var. *chinensis*

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This experiment was conducted on pack choi; pack choi (*Brassica campestris* var. *chinensis*) seeds to study whether priming with deep sea water (DSW) results in enhancement of seed emergence and seedling growth and to identify the optimum concentration of DSW for priming. Two experiments were conducted subsequently. In experiment 1, six concentrations of the DSW (R.O., 10%, 20%, 30%, 40% and 50%) from starting DSW solution (10 mS/cm conductivity 5,150 ppm) without NaCl and DW (distilled water), SSW (surface sea water), NaCl 0.3%, NaCl 0.6%, and NaCl 1% and in experiment 2, five concentrations of DSW (5%, 10%, 15%, 20%, and 30%) including NaCl were prepared and seeds were primed and seedling raised for 288 hours duration at 25°C. Beside this, hydro priming with plain water was also included as a control. Experiments were laid out in Completely Randomized Design (CRD) with three replications.

Result showed that 5% DSW including NaCl seed priming treatments had improved the emergence, seedling height, and root length as compare to other with DSW or without DSW treatments. Other priming (i.e. 10%, 20%, 30%, 40% and 50%) were not suitable for priming the seed. On the basis of seedlings growth parameters; emergence, seedling height, and length, 5% DSW including NaCl priming was the best priming treatments.

## F-F1-16

### Effect of Deep Sea Water Priming and Raising Seedlings Treatments on Germination and Raising Seedlings of *Chrysanthemum coronarium* var. *spatiosum*

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This experiment was conducted on crown daisy; crown daisy (*Chrysanthemum coronarium* var. *spatiosum*) seeds to study whether priming with deep sea water (DSW) results in enhancement of seed emergence and seedling growth and to identify the optimum concentration of DSW for priming. Two experiments were conducted subsequently. In experiment 1, six concentrations of the DSW (R.O., 10%, 20%, 30%, 40% and 50%) from starting DSW solution (10 mS/cm conductivity 5,150 ppm) without NaCl and DW (distilled water), SSW (surface sea water), NaCl 0.3%, NaCl 0.6%, and NaCl 1% and in experiment 2, five concentrations of DSW (5%, 10%, 15%, 20%, and 30%) including NaCl were prepared and seeds were primed and seedling raised for 288 hours duration at 25°C. Beside this, hydro priming with plain water was also included as a control. Experiments were laid out in Completely Randomized Design (CRD) with three replications.

Result showed that 10% DSW including NaCl seed priming treatments had improved the emergence, seedling height, and root length as compare to other with DSW or without DSW treatments. Other priming (i.e. 20%, 30%, 40% and 50%) were not suitable for priming the seed. On the basis of seedlings growth parameters; emergence, seedling height, and length, 10% DSW including NaCl priming was the best priming treatments.