Arabidopsis Growing-Methods Development

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Treatments

- 1) Pro-Mix PGX, 200 ppm N fert weekly, drained after each irrigation
- 2) Pro-Mix BX, 200 ppm N fert weekly, drained after each irrigation
- 3) Pro-Mix HP, 200 ppm N fert weekly, drained after each irrigation
- 4) Sunshine LA4, 200 ppm N fert weekly, drained after each irrigation
- 5) Metro Mix Redi-earth, 200 ppm N fert weekly, drained after each irrigation
- 6) Metro Mix 360, 200 ppm N fert weekly, drained after each irrigation
- 7) 75% PGX / 25% Profile, 200 ppm N fert weekly, drained after each irrigation
- 8) 75% BX / 25% Profile, 200 ppm N fert weekly, drained after each irrigation
- 9) 75% HP / 25% Profile, 200 ppm N fert weekly, drained after each irrigation
- 10) 75% Sunshine / 25% Profile, 200 ppm N fert weekly, drained after each irrigation
- 11) 75% Redi-earth / 25% Profile, 200 ppm N fert weekly, drained after each irrigation
- 12) 75% Metro Mix 360 / 25% Profile, 200 ppm N fert weekly, drained after each irrigation
- 13) 75% PGX / 25% Turface, 200 ppm N fert weekly, drained after each irrigation
- 14) 75% BX / 25% Turface, 200 ppm N fert weekly, drained after each irrigation
- 15) 75% HP / 25% Turface, 200 ppm N fert weekly, drained after each irrigation
- 16) 75% Sunshine / 25% Turface, 200 ppm N fert weekly, drained after each irrigation
- 17) 75% Redi-earth / 25% Turface, 200 ppm N fert weekly, drained after each irrigation
- 18) 75% Metro Mix 360 / 25% Turface, 200 ppm N fert weekly, drained after each irrigation
- 19) 50% PGX / 50% Turface, 200 ppm N fert weekly, drained after each irrigation
- 20) 50% BX / 50% Turface, 200 ppm N fert weekly, drained after each irrigation
- 21) 50% HP / 50% Turface, 200 ppm N fert weekly, drained after each irrigation
- 22) 50% Sunshine / 50% Turface, 200 ppm N fert weekly, drained after each irrigation
- 23) 50% Redi-earth / 50% Turface, 200 ppm N fert weekly, drained after each irrigation
- 24) 50% Metro Mix 360 / 50% Turface, 200 ppm N fert weekly, drained after each irrigation
- 25) Turface, 200 ppm N fert weekly, drained after each irrigation
- 26) Profile, 200 ppm N fert weekly, drained after each irrigation
- 27) Vermiculite, medium grade, 200 ppm N fert weekly, drained after each irrigation
- 28) Ecolite, 200 ppm N fert weekly, drained after each irrigation

- 29) Pro-Mix PGX, 200 ppm N fert weekly, NOT drained after each irrigation
- 30) Pro-Mix BX, 200 ppm N fert weekly, NOT drained after each irrigation
- 31) Pro-Mix HP, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 32) Sunshine LA4, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 33) Metro Mix Redi-earth, 200 ppm N fert weekly, NOT drained after each irrigation
- 34) Metro Mix 360, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 35) 75% PGX / 25% Profile, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 36) 75% BX / 25% Profile, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 37) 75% HP / 25% Profile, 200 ppm N fert weekly, NOT drained after each irrigation
- 38) 75% Sunshine / 25% Profile, 200 ppm N fert weekly, NOT drained after each irrigation
- 39) 75% Redi-earth / 25% Profile, 200 ppm N fert weekly, NOT drained after each irrigation
- 40) 75% Metro Mix 360 / 25% Profile, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 41) 75% PGX / 25% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 42) 75% BX / 25% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 43) 75% HP / 25% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 44) 75% Sunshine / 25% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 45) 75% Redi-earth / 25% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 46) 75% Metro Mix 360 / 25% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 47) 50% PGX / 50% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 48) 50% BX / 50% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 49) 50% HP / 50% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 50) 50% Sunshine / 50% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 51) 50% Redi-earth / 50% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 52) 50% Metro Mix 360 / 50% Turface, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 53) Turface, 200 ppm N fert weekly, NOT drained after each irrigation
- 54) Profile, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 55) Vermiculite, medium grade, 200 ppm N fert weekly, **NOT** drained after each irrigation
- 56) Ecolite, 200 ppm N fert weekly, NOT drained after each irrigation

- 57) Pro-Mix PGX, **50** ppm N fert weekly, drained after each irrigation
- 58) Pro-Mix BX, 50 ppm N fert weekly, drained after each irrigation
- 59) Pro-Mix HP, 50 ppm N fert weekly, drained after each irrigation
- 60) Sunshine LA4, **50** ppm N fert weekly, drained after each irrigation
- 61) Metro Mix Redi-earth, **50** ppm N fert weekly, drained after each irrigation
- 62) Metro Mix 360, 50 ppm N fert weekly, drained after each irrigation
- 63) 75% PGX / 25% Profile, 50 ppm N fert weekly, drained after each irrigation
- 64) 75% BX / 25% Profile, **50** ppm N fert weekly, drained after each irrigation
- 65) 75% HP / 25% Profile, **50** ppm N fert weekly, drained after each irrigation
- 66) 75% Sunshine / 25% Profile, **50** ppm N fert weekly, drained after each irrigation
- 67) 75% Redi-earth / 25% Profile, **50** ppm N fert weekly, drained after each irrigation
- 68) 75% Metro Mix 360 / 25% Profile, **50** ppm N fert weekly, drained after each irrigation
- 69) 75% PGX / 25% Turface, 50 ppm N fert weekly, drained after each irrigation
- 70) 75% BX / 25% Turface, **50** ppm N fert weekly, drained after each irrigation
- 71) 75% HP / 25% Turface, 50 ppm N fert weekly, drained after each irrigation
- 72) 75% Sunshine / 25% Turface, 50 ppm N fert weekly, drained after each irrigation
- 73) 75% Redi-earth / 25% Turface, **50** ppm N fert weekly, drained after each irrigation
- 74) 75% Metro Mix 360 / 25% Turface, **50** ppm N fert weekly, drained after each irrigation
- 75) 50% PGX / 50% Turface, 50 ppm N fert weekly, drained after each irrigation
- 76) 50% BX / 50% Turface, 50 ppm N fert weekly, drained after each irrigation
- 77) 50% HP / 50% Turface, **50** ppm N fert weekly, drained after each irrigation
- 78) 50% Sunshine / 50% Turface, 50 ppm N fert weekly, drained after each irrigation
- 79) 50% Redi-earth / 50% Turface, **50** ppm N fert weekly, drained after each irrigation
- 80) 50% Metro Mix 360 / 50% Turface, **50** ppm N fert weekly, drained after each irrigation
- 81) Turface, **50** ppm N fert weekly, drained after each irrigation
- 82) Profile, **50** ppm N fert weekly, drained after each irrigation
- 83) Vermiculite, medium grade, 50 ppm N fert weekly, drained after each irrigation
- 84) Ecolite, 50 ppm N fert weekly, drained after each irrigation
- 85) PGX, flushed of salts at beginning of experiment
- 86) Sunshine, flushed of salts at beginning of experiment
- 87) PGX, HORT GREENHOUSE, Natural Day
- 88) Sunshine, HORT GREENHOUSE, Natural Day
- 89) PGX, self-watering capillary tray, 200 ppm N fert weekly
- 90) Sunshine, self-watering capillary tray, 200 ppm N fert weekly
- 91) PGX, self-watering capillary tray, 50 ppm N fert weekly
- 92) Sunshine, self-watering capillary tray, 50 ppm N fert weekly
- 93) PGX, RO-water, tray not drained, 200 ppm N fert weekly
- 94) Sunshine, RO-water, tray not drained, 200 ppm N fert weekly
- 95) PGX, RO-water capillary mat, 200 ppm N fert weekly

- 96) PGX, 24 hour chamber at 21.5C, drained at each irrigation, 200 ppm N fert weekly
- 97) PGX, 16 hour chamber at 21.5C/18C, drained at each irrigation, 200 ppm N fert weekly
- 98) PGX, 16 hour light shelf at 21.5C/18C, drained at each irrigation, 200 ppm N fert weekly
- 99) PGX, 24 hour light in greenhouse at 21.5C, drained at each irrigation, 200 ppm N fert weekly

100)

PGX, 16 hour light in greenhouse at 21.5C/18C, drained at each irrigation, 200 ppm N fert weekly

- 101) PGX, 16 hour light in greenhouse at 21.5/18C, drained at each irrigation, fertilized weekly with HGRH acidified water 200 ppm N
- 102) PGX, Osmocote slow-release fertilizer at 1/4-X rate, no liquid fertilizer
- 103) Sunshine, Osmocote at 1/4-X rate, no liquid fertilizer
- 104) PGX, Osmocote at 1/2-X rate, no liquid fertilizer
- 105) Sunshine, Osmocote 1/2-X rate, no liquid fertilizer
- 106) PGX, Osmocote slow-release fertilizer at 1-X rate, no liquid fertilizer
- 107) Sunshine, Osmocote at 1-X rate, no liquid fertilizer
- 108) PGX, Osmocote at 2-X rate, no liquid fertilizer
- 109) Sunshine, Osmocote 2-X rate, no liquid fertilizer
- 110) PGX ND greenhouse