**Subgroup Analysis – TWP\_No\_Outliers** (Excluding 'not' categories)
Based on 1648 effect sizes from 13 studies | Grand Mean: 15.19% \*\* Significance Level Grand Mean: 15.19% \*\* \*\*\* p < 0.001 \*\* p < 0.01 \* p < 0.05 Arragement surface (n=130) b **Climate zone** Ons p >= 0.05 (n=120) Arid Warm temperate (n=17) d Asia (n=117) Continent b Crop type (n=58)processing Fresh (n=17) **Emitter flow rate** <2 (n=45) 2–4 (n=41)С **Irrigation quality** Saline water (n=50) d Freshwater (n=88) **Mulch color** White (n=40)Transparent (n=37)Black (n=52) **Mulch material** biodegradable film (n=40)polyethylene (n=90) bІ Nitrogen <100 (n=39) 200-300 (n=21) 100-200 (n=23) Planting year Third (n=28) d Second (n=50)First (n=60)Rainfall =200 (n=44)200-500 (n=42) Soil bulk density (n=104) = 1.35 <1.35 (n=6)Soil organic matter = 1.5% (n=57) < 1.5% (n=16) Soil salinity <2 (n=79) Soil texture fine soils (n=20)medium soils (n=72)(n=45)coarse soils -50% 25% 50% -25% 0%

Effect on Total Water Productivity (%)