

**Supplementary Figure 1.** Tomato plants ectopically expressed Mt-NOOT gene. They show leaflets complexity texture leading to more condensation in the green part than control tomato (A) Some terminal leaflet is fused with lateral one (B) leaflet originated inside other leaflet (C) terminal leaflet is missing.





**Supplementary Figure 2.** Tomato flower consists of 5 sepals, 5 petals, and 5 stamen in both transgenic and non-transgenic flower. The distinct phenotype for the *Mt-NOOT* transgenic flower is the pointed needle shape like sepals (A). Each bloom in Mt-NOOT transgenic tomato individual plant giving rise to 13-17 tomato's' fruits in average (B) while this average was from 2-6 tomato's fruits in control plant (C). This shows a high significance difference in fruit productivity between the two lines. Transgenic tomato fruit phenotype is similar to the non-transgenic one except the pointed long needle like green sepals present only in the transgenic tomato fruits (D), while the sepals in non-transgenic appeared normally (E). Transgenic tomato fruits one-month post harvesting stored on shelf in vented plastic harvested bins at 25°C and dark dry condition showed health appearance and fresh texture (F). In contrast, the non-transgenic tomato fruits stored at same condition for the same period are spoiled and rotted (G). Transgenic tomato fruits 6 months post-harvesting stored on shelf in vented bins at 25°C and dark dry condition are showing drying feature without any contamination or spoiling process without addition of any food preservative (H).