described below. In case of conflict, the patent specification, including definitions, will control. In addition, the materials, methods, and examples are illustrative only and are not intended to be necessarily limiting.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Some embodiments of the invention are herein described, by way of example only, with reference to the accompanying drawings. With specific reference now to the drawings in detail, it is stressed that the particulars shown are by way of example and for purposes of illustrative discussion of embodiments of the invention. In this regard, the description taken with the drawings makes apparent to those skilled in the art how embodiments of the invention may be practiced.

In the drawings:

FIG.1 illustrates peanut's seed developmental stages (cv. Hanoch).

FIG. 2 illustrates the four stages of Pronut Structured Gradual Exposure (ProSGEP) protocol, according to embodiments of the present invention.

FIG. 3A demonstrates the usage of X-ray for seed stage development.

FIG. 3B illustrates the correlation between the seed ratio (calculated from the x-ray photos) and the manual determination of seed stage.

FIG. 4 is a graph illustrating the correlation between testing allergenicity using the extract from immature peanuts and by specific antibody levels against AraH2 in blood.

FIGs. 5A-B. Skin Prick Test (SPT) with commercial peanut (A) or with R5 peanut (B) in preschool children with (TrueAllergy = 1) and without (TrueAllergy = 0) challenge proven peanut allergy. Test results are provided by wheal size (mm). Cutoffs are presented by red lines.

FIG. 6 is a ROC comparing SPT with commercial peanut test vs ROC of Pronut (R5) in the diagnosis of preschool peanut allergic children allergy.

FIG. 7A is a ROC comparing SPT with Pronut (R5) with the serum level of peanut specific IgE in the diagnosis of preschool peanut allergic children allergy.

FIG. 7B is a ROC comparing SPT with Pronut (R5) with the serum level of Ara h2 specific IgE in the diagnosis of preschool peanut allergic children allergy.

FIGs.8A-C are graphs illustrating the difference between two peanut varieties (Mona; Hanoch) in Total Pod Yield (Figure 8A; grams/plot), R5 Seed Yield (Figure 8B; number of tubes per plot) and R5 Yield efficiency (Figure 8C; %). Varieties were harvested on two dates, 71 and 77 days post planting (D). Also each variety was treated with Ethrel (350 cc/D) or not treated (control).