

### Essential Fatty Acid Levels of Some Sri Lankan Seeds

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Linoleic acid and  $\alpha$ -linolenic acid are members of the group of essential fatty acids so called as they cannot be produced within the body and must be acquired through diet. In this study, nineteen types of seeds that are available in Sri Lanka were analysed for linoleic acid, and  $\alpha$ -linolenic acid contents. The fatty acid composition was analysed by direct trans-esterification followed by gas liquid chromatography. The total fat percentage of tested seeds were as follows: *Canarium zeylanicum* (Retz.) Bl.(52.22  $\pm$  2.08), *Manihot glaziovii* (Mull.) Arg. (18.6  $\pm$  1.52), *Psidium guajava* L. (14.72  $\pm$  0.57), *Limonia acidissima* L. (12.5  $\pm$  1.12), *Sesbania grandiflora* (L.) Poiret (7.12  $\pm$  1.36), *Leucaena leucocephala* (Lam.) deWit. (6.28  $\pm$  0.69), *Setaria italica* (L.) Beauv. (4.96  $\pm$  0.15), *Panicum milliaceum* L. (2.93  $\pm$  0.17), *Tithonia diversifolia* (Hemsl.) A. Gray (1.43  $\pm$  0.08) and *Vigna unguiculata* (L.) Walp. (0.93  $\pm$  0.17). The percentage of linoleic acid content was obtained as *Setaria italica* (75.88  $\pm$  1.97), *Tithonia diversifolia* (Hemsl.) A. Gray (68.28  $\pm$  1.05), *Panicum milliaceum* L. (67.8  $\pm$  .25), *Manihot glaziovii* (Mull.) Arg.(64.71  $\pm$  .33), *Sesbania grandiflora* (L.) Poiret (64.26  $\pm$  4.85) and *Leucaena leucocephala* (Lam.) deWit.( 63.52  $\pm$  1.44). *Psidium guajava* L. (Ata pera) seeds contained highest percentage of linolenic acid with 87.57 %, while *Limonia acidissima* (32.33  $\pm$  1.90), the *Canarium zeylanicum* (23.21  $\pm$  0.55) and *Vigna unguiculata* (L.) Walp.(16.04  $\pm$  0.07) were among the other seeds that are rich in linolenic acid.