WHAT IS CLAIMED IS:

1. A non-genetically modified determinate castor plant.

2. The plant of claim 1, comprising a loss of function genetic alteration in TFL1 locus.

3. The plant of claim 1, comprising a loss of function genetic alteration conferring a determinate phenotype in a genetic locus selected from the group consisting of the genetic loci listed in Table 5.

4. The plant of claim 1, comprising a loss of function genetic alteration conferring a determinate phenotype in a genetic locus selected from the group consisting of SEQ ID NO: 67-90.

5. The plant of claim 2, wherein said.

6. The plant of claim 5, wherein said deletion is:
on Scaffold 30055 (SEQ ID NO: 1);
is flanked by primers L3-F (SEQ ID NO: 10) and R6-R (SEQ ID NO: 57);
said deletion is lacking an SNP marker selected from the group of SNPs in Table 2 above; or
a breakpoint of said deletion is defined by SEQ ID NO: 2.

7. The plant of claim 1, having a stable vigor for at least 5 generations.

8. The plant of claim 1, having a G nucleotide in position 371820 of SEQ ID NO: 1 in a homozygous form.

9. A determinate castor plant having been genetically modified to down-regulate activity or expression of TFL1 (SEQ ID NO: 3 or 4).

10. A determinate castor plant having been genetically modified to down-regulate activity or expression of a gene selected from the group consisting of SEQ ID NO: 67-90.

11. The determinate castor plant of claim 1, being a plant of an inbred line.

12. A part of the castor plant of claim 1 and optionally wherein said plant part is a seed.

13. A hybrid seed of the castor plant of claim 1.

14. A method of selecting a determinate castor plant, the method comprising detecting in a genome of a castor plant a loss of function genetic alteration in a chromosomal region flanked by L3-F (SEQ ID NO: 10) and R6-R (SEQ ID NO: 57) or a G nucleotide in position 371820 of SEQ ID NO: 1 being in linkage disequilibrium with said deletion, wherein presence of a loss of function genetic alteration or said in said chromosomal region is indicative of a determinate castor plant.

15. Oil produced from the plant of claim 1.

16. A method of producing oil, the method comprising:

(a) providing seeds of the castor plant of claim 1;

(b) extracting oil from said seeds.

17. A cake of the castor plant of claim 1.

18. A method of producing a cake, the method comprising:

(a) providing seeds of the castor plant of claim 1;

(b) crushing said seeds so as to obtain crushed seeds; and

(c) removing oil from said crushed seeds, thereby producing the cake.

19. A castor meal of claim 1.

20. A processed product of the plant of claim 1, wherein the product comprises DNA of the plant.