

Table S1. The relative content of main fatty acids (FA) and fatty alcohols (FA-OH) in lipids of mature jojoba seeds (% of total FA and FA-OH).

FA/FA-OH	Accession 144	Accession 145	Accession 146	Accession 147
16:0	0.93 ± 0.08	0.68 ± 0.12	0.88 ± 0.12	0.85 ± 0.20
18:1	6.50 ± 0.57	5.89 ± 0.65	7.14 ± 0.86	8.29 ± 2.38
20:1	35.90 ± 0.39	37.25 ± 0.23	35.83 ± 0.74	35.49 ± 1.31
22:1	6.02 ± 0.29	5.60 ± 0.72	5.71 ± 0.51	4.93 ± 1.14
24:1	0.65 ± 0.15	0.58 ± 0.20	0.45 ± 0.16	0.45 ± 0.20
18:1-OH	0.72 ± 0.07	0.62 ± 0.14	0.55 ± 0.11	0.79 ± 0.35
20:1-OH	23.67 ± 1.37	25.41 ± 2.82	25.08 ± 2.47	27.27 ± 4.46
22:1-OH	22.01 ± 1.06	20.74 ± 1.92	21.24 ± 1.84	19.34 ± 3.78
24:1-OH	3.61 ± 0.43	3.23 ± 1.04	3.13 ± 0.75	2.60 ± 1.03

Data represent the mean of four biological replicates ± standard deviation.

Table S2. Lipase activity in the microsomal fractions isolated from jojoba seeds at different stages of germination.

Substrate added (1 nmol/assay)	% of added radioactivity in free fatty acids fraction			
	Germination time			
	0 day	14 days	35 days	50 days
Triacylglycerol:				
Tri-[¹⁴ C]18:1-TAG	traces	6.2 ± 0.7	44.8 ± 4.4	67.3 ± 4.2
Wax ester:				
20:1-OH-[¹⁴ C]18:1-FA	traces	2.2 ± 0.7	11.7 ± 2.5	18.5 ± 1.0

Data represent the mean of four to six biological replicates ± standard deviation. Assay condition: aliquots (2.5 nmol of endogenous PC) of microsomal fractions of jojoba germinating seed; substrates added to freeze-dried microsomes in 19 µl benzene; benzene evaporation and addition of 100 µl 0.1 M phosphate buffer (pH 7.2); 15 min incubation at 35°C.

Table S3. List of 10 genes encoding putative jojoba lipases with the highest gene expression levels during seed development.

Gene ID	SwissProt/Pfam description	Tissue with the highest expression level
Sc01g0002810	Lipase (class 3)	Cotyledons
Sc04g0004940	GDSL esterase/lipase	Cotyledons
Sc04g0009590	GDSL esterase/lipase	Cotyledons
Sc07g0004640	GDSL esterase/lipase	Cotyledons
Sc10g0010100	GDSL esterase/lipase	Cotyledons
Sc12g0010090	GDSL esterase/lipase	Seed coat
Sc12g0010880	GDSL esterase/lipase	Cotyledons
Sc16g0010020	GDSL esterase/lipase	Seed coat
Sc17g0002600	GDSL esterase/lipase	Seed coat

The genes were selected based on the data presented by Sturtevant et al. (2020) in Supplementary materials (Table S16 and S17) [8].