Supplementary Data

This supplementary data is a part of a paper entitled "Effect of Acetic Acid and/or Sodium Hydroxide Treatment towards Characters of Wonosari Natural Zeolite for Hydrotreatment of Castor Oil into Biofuel".

Table S1. Products distribution based on GC-MS in Fig.S1

Fraction	Ret. Time (min.)	Predicted compound	Molecular mass (g/mol)
Gasoline (C_4-C_{12})	2.28	Butane (C_4)	58.12
	2.72	Hexene (C_6)	84.16
	2.79	Hexane (C_6)	86.18
	3.90	Heptene (C_7)	98.18
	4.05	Heptane (C_7)	100.20
	6.90	Octane (C_8)	114.23
	14.14	Octadiene (C_8)	110.20
	10.42	Undecene (C_{11})	156.31
	14.30	Nonene (C_9)	126.24
	34.35	Dodecene (C_{12})	168.20
	34.49	Dodecane (C_{12})	170.30
Diesel (C_{13}-C_{22})	40.79	Undecenoic acid (C_{19})	184.20
	36.58	Octadecanoic acid (C_{18})	248.50
Others	2.93	Cyclopropane	42.08
	3.07	Acetic acid	60.05
	3.49	Benzene	78.11
	5.85	Toluene	92.14
	10.75	Cyanic acid	43.02
	11.29	Heptanal	116.80
	24.43	Hydroperoxide	34.01
	24.51	Naphthalene	128.10
	27.05	Silane	32.12
	27.17	Heptanoic acid	130.10
	27.40	Cyclopentaneundecanoic acid	254.40
	28.71	Bromo heptane	179.10
	29.40	Pentanoyl chloride	120.50
	29.60	2-Nonenal	140.20
	31.81	1,2,5,6-Diepoxycyclooctane	140.80
	35.49	Cyclopropanepentanoic acid	310.00
	35.94	13-Docosenoic acid	352.00
	36.58	1-Nitro-2-octanone	173.00
	41.87	Oleic acid	282.20

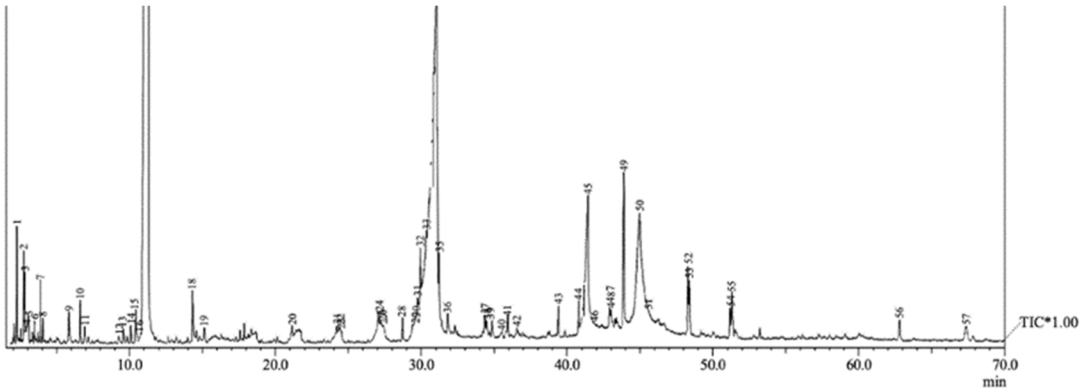

Fig S1. GC-MS chromatogram of liquid product of hydrotreament of castor oil using ZAA catalyst