

LAMPIRAN I
SERTIFIKAT BENIH PENJENIS KEDELAI DEVON 1



BADAN PENELITIAN DAN PENGEMBANGAN PERTANIAN
PUSAT PENELITIAN DAN PENGEMBANGAN TANAMAN PANGAN
BALAI PENELITIAN TANAMAN ANEKA KACANG DAN UMBI

BENIH DASAR KEDELAI

Nomor	1277/033 KD DvI.BD.Mjl.19/12.20-LU.IX
Nama Varietas	DEVON 1
Daya Berkecambah	90,5 %
Kadar Air	8,9 %
Benih Murni	100 %
Benih Tanaman Lain	0,00 %
Kotoran Benih	0,00 %
Tgl. Selesai pengujian	17-11-2020
Tgl. Akhir berlakunya label	17-01-2021

Berat: 1 kg

Ket: Benih memenuhi syarat kesuburan, kesehatan, dan keseragaman di pertanaman

**BENIH BINA
BERSERTIFIKAT**

LSSM-01-B3



Malah, 23 Desember 2020
Wakil Direktur UPBS

Jr. Trustinah, MP
Nip 196203291989032001

No Seri. 1277

UNIT PENGELOLAAN BENIH SUMBER (UPBS)
BALAI PENELITIAN TANAMAN ANEKA KACANG DAN UMBI
Jl. Raya Kerdajapayak Kotak Pos 66 Malang 65101.
Jawa Timur. Telp.0341-801468. Fax. 0341-801496.
E-mail: balikabi@libang.deptan.go.id



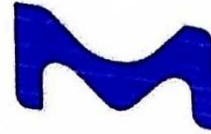
LAMPIRAN 2
SERTIFIKAT BENIH PENJENIS KEDELAI GEPAK KUNING

<p>UNIT PENGELOLAAN BENIH SUMBER (UPBS) BALAI PENELITIAN TANAMAN ANEKA KACANG DAN UMBI Jl. Raya Kendalpayak Kotak Pos 66 Malang 65101, Jawa Timur Telp. 0341-801468, Fax. 0341-801496. E-mail : balikab@litbang.pertanian.go.id</p> <p style="text-align: center;">BENIH BINA BERSERTIFIKAT</p> <p style="text-align: center;">LSSM-01-B3</p>	<p style="text-align: center;"></p> <p style="text-align: center;">BADAN PENELITIAN DAN PENGEMBANGAN PERTANIAN PUSAT PENELITIAN DAN PENGEMBANGAN TANAMAN PANGAN BALAI PENELITIAN TANAMAN ANEKA KACANG DAN UMBI</p> <p style="text-align: center;">BENIH PENJENIS KEDELAI</p> <table border="0"> <tr> <td>Nomor</td> <td>0581/008 KD.Gpk BS Kp 19/12 20-LU.III</td> </tr> <tr> <td>Nama Varietas</td> <td>GEPAK KUNING</td> </tr> <tr> <td>Daya Berkecambah</td> <td>83,0 %</td> </tr> <tr> <td>Kadar Air</td> <td>8,6 %</td> </tr> <tr> <td>Benih Murni</td> <td>100 %</td> </tr> <tr> <td>Benih Tanaman Lain</td> <td>0,00 %</td> </tr> <tr> <td>Kotoran Benih</td> <td>0,00 %</td> </tr> <tr> <td>Tgl. Selesai pengujian</td> <td>23-11-2020</td> </tr> <tr> <td>Tgl. Akhir berlakunya label</td> <td>23-01-2021</td> </tr> </table> <p style="text-align: right;">Berat: 2 kg</p> <p>Ket: Benih memenuhi syarat kesesuaian gepak. Benih siap untuk penggunaan di pertanaman</p> <p style="text-align: right;">Malang, 23 Desember 2020 Wakil Direktur UPBS  Ir. Trustinah, MP Nip 196203291989032001</p> <p style="text-align: center;"></p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p style="text-align: center;">No Seri. 0581</p> </div>	Nomor	0581/008 KD.Gpk BS Kp 19/12 20-LU.III	Nama Varietas	GEPAK KUNING	Daya Berkecambah	83,0 %	Kadar Air	8,6 %	Benih Murni	100 %	Benih Tanaman Lain	0,00 %	Kotoran Benih	0,00 %	Tgl. Selesai pengujian	23-11-2020	Tgl. Akhir berlakunya label	23-01-2021
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Kotoran Benih	0,00 %																		
Tgl. Selesai pengujian	23-11-2020																		
Tgl. Akhir berlakunya label	23-01-2021																		

LAMPIRAN 3

Certificate of Analysis Aluminium Chloride Anhydrous

Certificate of Analysis



8.01081.0000 Aluminium chloride anhydrous powder sublimed for synthesis
 Batch S7826681

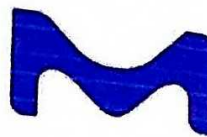
Batch Values		
Assay (complexometric)	100.8	%
Identity (ICP-OES)	passes test	

Date of examination (DD.MM.YYYY) 25.07.2019
 Minimum shelf life (DD.MM.YYYY) 31.10.2021
 Retested Date (DD.MM.YYYY) 29.10.2020

Dr. Jörg Bauer
 Responsible laboratory manager quality control

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LAMPIRAN 4
Certificate of Analysis Folin-Ciocalteu



Certificate of Analysis

1.09001.0000 Folin-Ciocalteu's phenol reagent
Batch HC02265701

Batch Values

Equivalent acid	$c(H^+) = 2 \text{ mol/l (2N)}$
Sensitivity (to phenol)	conforms
Sensitivity (to bovine serum albumin)	conforms

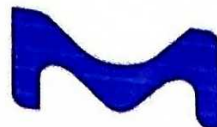
Date of release (DD.MM.YYYY) 20.05.2020
Minimum shelf life (DD.MM.YYYY) 31.05.2025

Tom Kupfer
Responsible laboratory manager quality control

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LAMPIRAN 5
Certificate of Analysis Sodium Carbonate

Certificate of Analysis



1.06392.0000 Sodium carbonate anhydrous for analysis EMSURE® ISO
Batch A1346992

	Spec. Values		Batch Values	
Assay (acidimetric; calculated on dried substance)	≥ 99.9	%	100.0	%
Chloride (Cl)	≤ 0.002	%	≤ 0.002	%
Phosphate (PO ₄)	≤ 0.001	%	≤ 0.001	%
Silicate (as SiO ₂)	≤ 0.002	%	≤ 0.002	%
Total sulfur (as SO ₄)	≤ 0.005	%	≤ 0.005	%
Total nitrogen (N)	≤ 0.001	%	≤ 0.001	%
Heavy metals (as Pb)	≤ 0.0005	%	≤ 0.0005	%
Al (Aluminum)	≤ 0.001	%	≤ 0.001	%
Ca (Calcium)	≤ 0.005	%	< 0.005	%
Fe (Iron)	≤ 0.0005	%	≤ 0.0005	%
K (Potassium)	≤ 0.01	%	< 0.01	%
Mg (Magnesium)	≤ 0.0005	%	≤ 0.0005	%
Loss on drying (300 °C)	≤ 1.0	%	≤ 1.0	%

Corresponds to ISO

Date of release (DD.MM.YYYY) 30.08.2018
Minimum shelf life (DD.MM.YYYY) 31.08.2023

Claudia Wiegand
Responsible laboratory manager quality control

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LAMPIRAN 6

Sigma-Aldrich Genistein

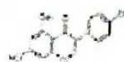
SIGMA-ALDRICH

3955 Spruce Street, Saint Louis, MO 63103, USA
 Website: www.sigmaaldrich.com
 Email USA: techserv@sigmaaldrich.com
 Outside USA: eurtechserv@sigmaaldrich.com

Product Specification

Product Name:
 Genistein - synthetic, ≥98% (HPLC), powder

Product Number: G6649
CAS Number: 446-72-0
MDL: MFCD00016952
Formula: C₁₅H₁₀O₆
Formula Weight: 270.24 g/mol
Storage Temperature: -20 °C



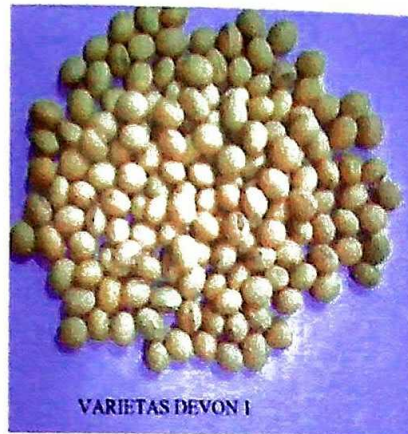
TEST

Specification

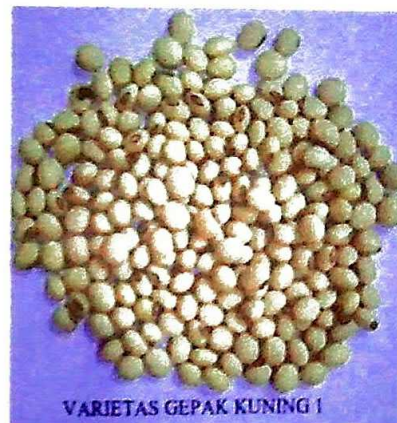
Appearance (Color)	Off-White to Yellow
Appearance (Form)	Powder
Solubility (Color)	Faint Yellow to Light Yellow
Solubility (Turbidity)	Clear
10 mg/mL, CH ₂ Cl ₂ /MeOH (1:1)	
Origin	Synthetic
EMM	38.1 - 39.8
Lambda max 262 to 263 nm in EtOH	
Purity (HPLC)	≥ 98 %

Specification: P011205 10000044872

Sigma-Aldrich warrants that at the time of the quality release or subsequent recent date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.









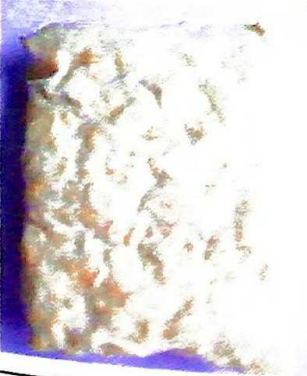


LAMPIRAN 7**Biji Kedelai**

Gambar 7.1 Biji Kedelai Devon 1



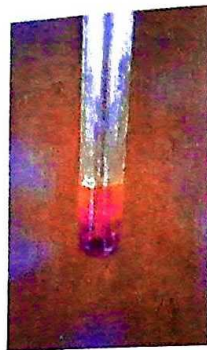


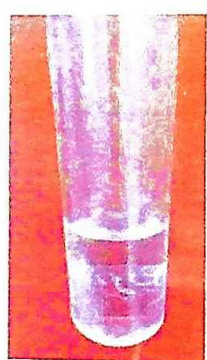

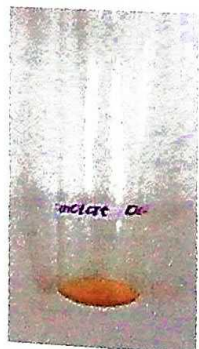


Gambar 7.2 Biji Kedelai Gepak Kuning











LAMPIRAN 8
Hasil Pembuatan Tempe

Varietas	42 Jam	47 Jam	52 Jam
Gepak Kuning			
			
Devon 1			
			

LAMPIRAN 9

Gambar Hasil Skrining Fitokimia Kedelai Gepak Kuning dan Devon 1

Golongan Senyawa	Gepak Kuning	Devon 1	Keterangan
Alkaloid	 <p>Alkaloid filtrat 1</p>  <p>Alkaloid filtrat 2</p>	 <p>Alkaloid filtrat 1</p>  <p>Alkaloid filtrat 2</p>	Positif
Fenol	 <p>Gepak Kuning</p>	 <p>Devon 1</p>	Positif
Flavonoid	 <p>Gepak flavonoid</p>		Negatif

<p>Triterpenoid dan steroid</p>			<p>Positif</p>
<p>Saponin</p>			<p>Positif</p>
<p>Tanin</p>			<p>Positif</p>
<p>Monoterpen & Seskuiterpen</p>			<p>Positif</p>
<p>Kuinon</p>			<p>Negatif</p>