

ANALISIS REKAMAN SUARA BARANG BUKTI DIGITAL

MENGGUNAKAN METODE AUDIO FORENSIK

SKRIPSI

Untuk Memenuhi Sebagian Persyaratan Mencapai Derajat Sarjana S-1

Program Studi Teknik Informatika



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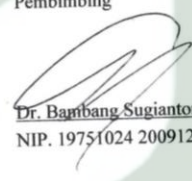
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Dengan ini kami berharap agar skripsi/tugas akhir Saudara tersebut di atas dapat segera dimunaqsyahkan. Atas perhatiannya kami ucapkan terima kasih.

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Yogyakarta, 8 Agustus 2018

Yang Menyatakan,



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“Berlelah-lelahlah, manisnya hidup terasa setelah lelah berjuang”

-Imam Asy-Syafi'i

“Berbuat baiklah kepada semua orang karena kau tidak tahu kapan roda akan berputar”

-Nurul Hasnah



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ANALISIS REKAMAN SUARA BARANG BUKTI DIGITAL MENGUNAKAN METODE AUDIO FORENSIK

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INTISARI

Audio Forensik merupakan salah satu bagian dari digital forensik, dimana audio forensik sendiri berfokus pada pemeriksaan barang bukti digital yang berkaitan dengan rekaman suara. Barang bukti digital sendiri sering diajukan dalam persidangan. Barang bukti yang diajukan ke persidangan haruslah barang bukti yang valid yang telah dianalisa oleh seorang yang ahli terkait dengan barang bukti tersebut.

Metode yang digunakan untuk menganalisis rekaman suara adalah metode audio forensik yang terdiri dari analisis *Pitch*, *Formant* dan *Bandwidth*, *Graphical Distribution* dan *Spectrogram*. Untuk menganalisis rekaman suara tersebut juga sesuai dengan *Standard Operational Procedure (SOP) 12 tentang Analysis Audio Forensic* dari *Digital Forensic Analyst Team (DFAT)*.

Hasil analisis dari rekaman suara barang bukti tersebut nantinya akan dibandingkan dengan rekaman suara pembanding yang telah dianalisis menggunakan metode audio forensic dan dibuktikan apakah rekaman suara barang bukti tersebut berasal dari orang yang sama atau tidak.

Kata Kunci: **Audio Forensik, Digital Forensik, Barang Bukti Digital, *Pitch*, *Formant* dan *Bandwidth*, *Graphical Distribution*, *Spectrogram*.**

ANALYSIS SOUND RECORDING OF DIGITAL EVIDANCE USING AUDIO FORENSIC METHODS

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ABSTRACT

Audio Forensic is a part of digital forensics, where audio forensics itself focuses on examining digital evidence relating to sound recordings. Which digital evidence itself is often submitted in court. The evidence submitted to the trial must be valid evidence which has been analyzed by an expert related to the evidence.

The method used to analyze sound recordings is audio forensic method consisting of Pitch analysis, Formant and Bandwidth, Graphical Distribution and Spectrogram. To analyze the voice recording is also in accordance with the Standard Operating Procedure (SOP) 12 on Analysis Audio Forensic from the Digital Forensic Analyst Team (DFAT).

The results of the analysis of the sound recordings of the evidence will be compared with comparative sound recordings that have been analyzed using the audio forensic method and proven whether the sound recordings of the evidence come from the same person or not.

Keywords: Forensic Audio, Digital Forensics, Digital Evidence, Pitch, Formant and Bandwidth, Graphical Distribution, Spectrogram.

BAB I

PENDAHULUAN

1.1 Latar Belakang

Dengan perkembangan teknologi yang pesat merubah pola pikir dan perilaku manusia di dunia. Teknologi juga merubah metode untuk melakukan tindak kejahatan, contohnya dalam kasus penyusutan, penyebaran narkoba, dan sebagainya. Berdasarkan statistik kriminal yang dilakukan Badan Pusat Statistik (BPS) tingkat kejahatan yang terjadi di Indonesia secara umum, pada tahun 2016 memiliki jumlah tindak kejahatan (*crime total*) sebesar 357.179 dan jumlah orang yang terkena kasus kejahatan (*crime rate*) berjumlah 140 orang. Dari jumlah kasus kejahatan tersebut banyak alat digital yang digunakan sebagai barang bukti seperti kamera CCTV yang rekaman dari kamera CCTV tersebut.

Adanya barang bukti digital sangat membantu petugas dalam mengungkapkan tindak pidana. Sehingga rekaman suara menjadi salah satu barang bukti digital (*digital evidence*) yang bisa digunakan. Berdasarkan Undang-Undang Informasi Transaksi Elektronik (UU ITE) No. 19 tahun 2016 pada Pasal 1 menyatakan bahwa:

“ Informasi Elektronik adalah salah satu sekumpulan data elektronik, termasuk tetapi tidak terbatas pada tulisan, suara, Gambar, peta, rancangan, foto, *electronic data interchange* (EDI), surat elektronik (*electronic mail*), telegram, teleks, telecopy atau sejenisnya, huruf, tanda, angka, kode, akses, simbol, atau perforasi

yang telah diolah yang memiliki arti atau dapat dipahami oleh orang yang mampu memahaminya”. Salah satu contoh penelitian menggunakan rekaman suara untuk dianalisis lebih lanjut, serta bagaimana tahapan dalam melakukan analisis pada barang bukti rekaman suara.

Sejauh ini sudah banyak pengujian pembuktian rekaman sudah banyak analisis rekaman suaras yang dilakukan yang sangat membantu dalam memahami bagaimana proses akuisisi barang bukti digital terutama akuisisi barang bukti rekaman suara salah satunya adalah penelitian Ahmad Subki yang membandingkan tingkat kemiripan rekaman suara asli dengan rekaman suara yang telah diubah menggunakan tiga jenis *voice changer* dan dari penelitiannya tersebut dapat disimpulkan ada beberapa *voice changer* yang sukar untuk menentukan *voice recognition* dari rekaman suara yang telah diubah.

Pembuktian rekaman suara barang bukti dilakukan dengan metode komparasi melalui parameter *pitch*, *formant*, *graphical distribution* dan *spectrogram* dan dengan prosedur penanganan barang bukti rekaman suara yang benar yang kemudian dilanjutkan dengan pemeriksaan dan analisisnya yang procedural, yang diharapkan hasil pemeriksaan *voice recognition* dapat menunjukkan secara ilmiah kepemilikan suara yang ada dalam rekaman tersebut.

1.2 Rumusan Masalah

Berdasarkan latar belakang di atas dapat dirumuskan permasalahan yang akan diselesaikan dalam penelitian ini adalah

1. Apakah analisis *pitch*, *formant*, *graphical distribution* dan *spectrogram* dapat digunakan untuk menentukan keaslian rekaman suara?
2. Bagaimana tahap-tahapan analisis *voice recognition* secara *procedural* terhadap barang bukti rekaman suara?
3. Bagaimana hasil analisis rekaman barang bukti (*unknown samples*) dan rekaman suara pembandingan (*known samples*)?

1.3 Batasan Masalah

Batasan-batasan masalah yang digunakan dalam penelitian ini adalah

1. Analisis yang dilakukan yaitu analisis *pitch*, *formant* dan *spectrogram* pada barang bukti rekaman suara pembandingan/subjek dan rekaman suara barang bukti yaitu rekaman suara yang telah diubah menggunakan *voice changer*.
2. Aplikasi yang digunakan untuk melihat hasil graphic rekaman suara adalah *Praat* dan *Gnumeric*.
3. Pada penelitian ini jenis file audio yang digunakan adalah **.wave* dan **.mp3*.
4. Jumlah kata yang dianalisis adalah 25 kata.
5. Pada saat penelitian ini dilakukan bunyi pada rekaman suara adalah “Segera kirimkan uang ke rekeningku hari ini barang sudah ada, kalau bisa sore ini datang ke rumah ambil barang di jalan cendrawasih nomor sembilan belas”.

1.4 Tujuan Penelitian

Adapun tujuan penelitian berdasarkan rumusan masalah adalah:

1. Membandingkan hasil dari analisis *pitch*, *formant* dan *spectrogram* antara rekaman suara asli dengan rekaman suara palsu.
2. Melakukan tahapan-tahapan analisis *voice recognition* secara *procedural* yang sesuai dengan *Standard Operating Procedure* (SOP) 12 tentang Analisis Audio Forensik dari *Digital Forensict Analyst Team* (DFAT).
3. Analisis yang dilakukan pada rekaman suara barang bukti (*unknown samples*) dan suara pembandingan (*known samples*) secara komprehensif seperti analisis statistik *One Way Anova* (*Analysis of Variance*) terhadap *pitch*, *formant* dan *formant bandwidth* serta analisis spektrogram yang didasarkan pada pola khas *formant*.

1.5 Manfaat Penelitian

Dari penelitian ini diharapkan dapat memberikan kontribusi pada analisis *audio forensic* terkait kasus kejahatan yang menggunakan rekaman suara palsu atau dengan mengubah suara dengan *voice changer*, sehingga dapat membantu ataupun mempermudah untuk memecahkan kasus kejahatan dan dapat membuktikan secara ilmiah sehingga dapat dibuktikan ke pengadilan.

1.6 Sistematika Penulisan

Penyusunan laporan penelitian ini mengkaji beberapa bab pembahasan dalam pengerjaannya. Sistematika penulisan dimulai dari bab 1 sampai bab 5 yaitu:

BAB I Pendahuluan

BAB II Tinjauan Pustaka dan Landasan Teori

BAB III Metode Penelitian

BAB IV Hasil dan Pembahasan

BAB V Kesimpulan dan Saran



BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil penelitian yang telah dilakukan penulis, maka dapat diambil kesimpulan sebagai berikut:

1. Analisis *pitch*, *formant* dan *bandwidth*, *graphical distribution*, dan *spectrogram* dapat membuktikan keaslian rekaman suara sesuai dengan prosedur yang telah ada yaitu pengakuisisian data yaitu dengan melakukan tahap imaging sehingga barang bukti tetap aman, kemudian proses *audio enhancement* yaitu proses rekaman suara dalam tahap *noise filter* atau menghilangkan *noise* yang ada pada rekaman suara sehingga suara yang ada pada barang bukti rekaman suara dapat membantu dalam tahap analisis dan selanjutnya ada *decoding* atau ekstrasi informasi *pitch*, *formant* dan *spectrogram* yaitu rekaman suara dipotong-potong dari kata perkata untuk batas minimal dari kata yang dianalisis adalah 20 kata ini mengacu pada peraturan FBI tentang SOP dalam audio forensik..
2. Adapun prosedur tahapan *voice recognition* yaitu melakukan tahap analisis *pitch* dari rekaman suara yang telah diekstrak setelah itu dilanjutkan dengan analisis *formant* dan *bandwidth* yaitu analisis Anova dan *likelihood ratio* kemudian analisis *graphical distribution* dan terakhir adalah analisis *spectrogram*.

3. Berdasarkan hasil dari seluruh rekaman suara barang bukti dan pembandingan setelah melakukan berbagai tahap analisis maka rekaman suara tersebut IDENTIK yang berasal dari orang yang sama.

5.2 Saran

1. Perlu lebih banyak melakukan pengujian dengan berbagai rekaman suara yang telah diubah dengan *voice changer* ataupun suara seseorang yang memiliki kesamaan.
2. Pada penelitian ini menggunakan rekaman suara yang telah diubah dengan *voice changer* sebagai contoh rekaman suara barang bukti, alangkah baiknya jika memperbanyak rekaman suara pembandingan dari orang yang berbeda sehingga dapat dengan jelas dilihat perbedaannya.
3. Analisis audio forensik juga bisa digunakan sebagai penelitian lain yang terkait dengan suara contoh untuk membandingkan tingkat kemiripan suara si A dengan si B.

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LAMPIRAN

1. Analisis statistik *pitch*

Tabel Lampiran 1.1 Analisis statistik *pitch* kata “segera”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘segera’		
<i>Pitch minimum</i>	124.05564560104307 Hz	223.37427991976588 Hz
<i>Pitch maximum</i>	167.31038650208248 Hz	284.54388764275626 Hz
<i>Pitch quantile</i>	146.2994523148486 Hz	248.19827555788322 Hz
<i>Pitch mean</i>	146.8651507233047 Hz	250.93221877403434 Hz
<i>Pitch standar deviasi</i>	10.72795457801168 Hz	15.827510647380969 Hz

Tabel Lampiran 1.2 Analisis statistik *pitch* kata “kirinkan”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘kirinkan’		
<i>Pitch minimum</i>	110.47853437673272 Hz	244.40437865148863 Hz
<i>Pitch maximum</i>	171.93310803289063 Hz	298.89284094246347 Hz
<i>Pitch quantile</i>	154.53210673607649 Hz	268.3845510248051 Hz
<i>Pitch mean</i>	152.92332080796817 Hz	268.2297168661413 Hz
<i>Pitch standar deviasi</i>	10.169486003241882 Hz	15.768957421729308 Hz

Tabel Lampiran 1.3 Analisis statistik *pitch* kata “uang”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘uang’		
<i>Pitch minimum</i>	145.99298984045296 Hz	247.71516424940114 Hz
<i>Pitch maximum</i>	164.3877451500504 Hz	267.016054731279 Hz

<i>Pitch quantile</i>	150.45786174514384 Hz	254.81248990013702 Hz
<i>Pitch mean</i>	152.3009642433352 Hz	256.9650828203848 Hz
<i>Pitch standar deviasi</i>	5.28540492644363 Hz	6.860535678394446 Hz

Tabel Lampiran 1.4 Analisis statistik *pitch* kata “ke”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘ke’		
<i>Pitch minimum</i>	148.6955209852119 Hz	258.5319208752025 Hz
<i>Pitch maximum</i>	159.67363573816098 Hz	286.1581629031724 Hz
<i>Pitch quantile</i>	153.41604389448253 Hz	266.7642355322524 Hz
<i>Pitch mean</i>	154.15610338994279 Hz	268.84087106083297 Hz
<i>Pitch standar deviasi</i>	3.586578648655001 Hz	7.812057511499924 Hz

Tabel Lampiran 1.5 Analisis statistik *pitch* kata “rekeningku”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘rekeningku’		
<i>Pitch minimum</i>	143.14802263781095 Hz	243.5604581061276 Hz
<i>Pitch maximum</i>	213.04927405744422 Hz	275.9183722128746 Hz
<i>Pitch quantile</i>	149.51588088557799 Hz	249.0348251879941 Hz
<i>Pitch mean</i>	152.79431386649955 Hz	251.2124952104676 Hz
<i>Pitch standar deviasi</i>	12.679081011784943 Hz	7.616079378437515 Hz

Tabel Lampiran 1.6 Analisis statistik *pitch* kata “hari”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘hari’		
<i>Pitch minimum</i>	130.93895490152286 Hz	236.56567958265228 Hz
<i>Pitch maximum</i>	147.74833410941602 Hz	255.28992031538968 Hz
<i>Pitch quantile</i>	145.570660389502 Hz	247.5199556121539 Hz
<i>Pitch mean</i>	143.95539329117457 Hz	247.3776824053327 Hz
<i>Pitch standar deviasi</i>	4.493158273829029 Hz	5.139091459245823 Hz

Tabel Lampiran 1.7 Analisis statistik *pitch* kata “ini”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘ini’		
<i>Pitch minimum</i>	124.87380660666841 Hz	224.3228138850289 Hz
<i>Pitch maximum</i>	133.9227361615024 Hz	230.49922048931896 Hz
<i>Pitch quantile</i>	129.03728806151577 Hz	227.79103939800598 Hz
<i>Pitch mean</i>	128.7438137647122 Hz	227.84398545927715 Hz
<i>Pitch standar deviasi</i>	2.2237318124165277 Hz	1.401784846725614 Hz

Tabel Lampiran 1 8 Analisis statistik *pitch* kata “barang”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘barang’		
<i>Pitch minimum</i>	90.01651405772927 Hz	204.42425494935893 Hz
<i>Pitch maximum</i>	157.8282821954862 Hz	247.8346599011783 Hz
<i>Pitch quantile</i>	124.0803508595869 Hz	222.77069939508937 Hz
<i>Pitch mean</i>	127.786270157073 Hz	226.69256682652411 Hz
<i>Pitch standar deviasi</i>	16.831558370705604 Hz	10.598508977332978 Hz

Tabel Lampiran 1.9 Analisis statistik *pitch* kata “sudah”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘sudah’		
<i>Pitch minimum</i>	111.48285783348622 Hz	211.50091086196508 Hz
<i>Pitch maximum</i>	150.7135234147315 Hz	267.29242949604816 Hz
<i>Pitch quantile</i>	129.57681239616437 Hz	238.12436863279473 Hz
<i>Pitch mean</i>	130.02456275661015 Hz	240.0656303508215 Hz
<i>Pitch standar deviasi</i>	12.120692787302795 Hz	15.566326079907512 Hz

Tabel Lampiran 1.10 Analisis statistik *pitch* kata “ada”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘ada’		
<i>Pitch minimum</i>	94.3114583550937 Hz	179.72496814864434 Hz
<i>Pitch maximum</i>	121.48172006814595 Hz	222.1117775083332 Hz
<i>Pitch quantile</i>	114.61389454021062 Hz	207.74048632177957 Hz
<i>Pitch mean</i>	112.25348987007358 Hz	205.64939568605422 Hz
<i>Pitch standar deviasi</i>	6.973335299776244 Hz	10.18232102015718 Hz

Tabel Lampiran 1.11 Analisis statistik *pitch* kata “kalau”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘kalau’		
<i>Pitch minimum</i>	135.1826885043691 Hz	252.77782236656586 Hz
<i>Pitch maximum</i>	364.95316756082025 Hz	261.6391542294983 Hz
<i>Pitch quantile</i>	150.58698465928995 Hz	255.75964116515104 Hz
<i>Pitch mean</i>	160.3678637959246 Hz	256.2573167102688 Hz
<i>Pitch standar deviasi</i>	47.186078109790984 Hz	2.9068417217348945 Hz

Tabel Lampiran 1.12 Analisis statistik *pitch* kata “bisa”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘bisa’		
<i>Pitch minimum</i>	141.6937952796944 Hz	217.85672356930488 Hz
<i>Pitch maximum</i>	180.23954330792373 Hz	305.83502730991034 Hz
<i>Pitch quantile</i>	169.22150996616992 Hz	250.83786520730675 Hz
<i>Pitch mean</i>	163.15063887568326 Hz	254.6850108190209 Hz
<i>Pitch standar deviasi</i>	12.936034097753838 Hz	25.708766348565934 Hz

Tabel Lampiran 1.13 Analisis statistik *pitch* kata “sore”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘sore’		
<i>Pitch minimum</i>	145.52398652819576 Hz	252.9021381956569 Hz
<i>Pitch maximum</i>	169.97867875586553 Hz	295.71239194256333 Hz
<i>Pitch quantile</i>	153.7093417044338 Hz	269.2349426115964 Hz
<i>Pitch mean</i>	154.7516145106495 Hz	269.2349426115964 Hz
<i>Pitch standar deviasi</i>	5.353000900544639 Hz	13.268034764986517 Hz

Tabel Lampiran 1.14 Analisis statistik *pitch* kata “ini”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘ini’		
<i>Pitch minimum</i>	158.64581517085423 Hz	270.8827051129631 Hz
<i>Pitch maximum</i>	179.04563348179263 Hz	283.0138960004019 Hz
<i>Pitch quantile</i>	163.65968979916772 Hz	275.4020583305571 Hz
<i>Pitch mean</i>	165.22435650521285 Hz	275.9442018008169 Hz
<i>Pitch standar deviasi</i>	5.621566918385085 Hz	3.7998415159153605 Hz

Tabel Lampiran 1.15 Analisis statistik *pitch* kata “datang”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘datang’		
<i>Pitch minimum</i>	130.6179771780252 Hz	191.06679201697813 Hz
<i>Pitch maximum</i>	158.16845105583633 Hz	256.781754460099 Hz
<i>Pitch quantile</i>	147.5684703092869 Hz	249.7866001318657 Hz
<i>Pitch mean</i>	145.48390686414498 Hz	43.86930398631534 Hz
<i>Pitch standar deviasi</i>	8.50677372748404 Hz	14.431438103129343 Hz

Tabel Lampiran 1.16 Analisis statistik *pitch* kata “ke”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘ke’		
<i>Pitch minimum</i>	127.75766501524679 Hz	241.33169159286376 Hz
<i>Pitch maximum</i>	164.04004777208942 Hz	266.83730312370085 Hz
<i>Pitch quantile</i>	138.88179947020177 Hz	250.55941403142356 Hz
<i>Pitch mean</i>	143.1639477805544 Hz	252.24656570890994 Hz
<i>Pitch standar deviasi</i>	12.240736764939347 Hz	10.428269121775005 Hz

Tabel Lampiran 1.17 Analisis statistik *pitch* kata “rumah”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘rumah’		
<i>Pitch minimum</i>	129.99502431613004 Hz	230.28790950690117 Hz
<i>Pitch maximum</i>	149.35254152251585 Hz	250.2839220951919 Hz
<i>Pitch quantile</i>	142.6079772397057 Hz	241.709785688127 Hz
<i>Pitch mean</i>	141.30829083252513 Hz	240.8667877568292 Hz

<i>Pitch</i> standar deviasi	5.401194701797493 Hz	6.584376761829985 Hz
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Tabel Lampiran 1.18 Analisis statistik *pitch* kata “ambil”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘ambil’		
<i>Pitch minimum</i>	86.10066358079919 Hz	196.1331089448004 Hz
<i>Pitch maximum</i>	130.49795360035202 Hz	230.94191871666234 Hz
<i>Pitch quantile</i>	121.37033603575861 Hz	223.76484954705333 Hz
<i>Pitch mean</i>	117.87606885187373 Hz	219.46876007865984 Hz
<i>Pitch</i> standar deviasi	2.1588029553713 Hz	10.871863850283566 Hz

Tabel Lampiran 1.19 Analisis statistik *pitch* kata “barang”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘barang’		
<i>Pitch minimum</i>	118.91814549906866 Hz	187.40613420246157 Hz
<i>Pitch maximum</i>	151.7869962553079 Hz	248.85536674868266 Hz
<i>Pitch quantile</i>	134.16024245168447 Hz	211.07312558557504 Hz
<i>Pitch mean</i>	134.67198875282003 Hz	215.00133142136573 Hz
<i>Pitch</i> standar deviasi	8.94876800240771 Hz	17.53411629414866 Hz

Tabel Lampiran 1.20 Analisis statistik *pitch* kata “di”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘di’		
<i>Pitch minimum</i>	110.76929282721396 Hz	216.56608521474985 Hz
<i>Pitch maximum</i>	122.08006646164475 Hz	235.58531699233876 Hz
<i>Pitch quantile</i>	118.24334530680952 Hz	229.4389137531275 Hz

<i>Pitch mean</i>	118.0499893659624 Hz	227.91583698128636 Hz
<i>Pitch standar deviasi</i>	3.054034368620599 Hz	7.119532632090456 Hz

Tabel Lampiran 1.21 Analisis statistik *pitch* kata “jalan”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘jalan’		
<i>Pitch minimum</i>	124.86506078327773 Hz	214.7706692863239 Hz
<i>Pitch maximum</i>	135.64578104553578 Hz	234.96904566545777 Hz
<i>Pitch quantile</i>	129.4014733899496 Hz	226.06102368553547 Hz
<i>Pitch mean</i>	129.89370985021895 Hz	224.45709782023306 Hz
<i>Pitch standar deviasi</i>	3.8456160208640044 Hz	6.7418262674074745 Hz

Tabel Lampiran 1.22 Analisis statistik *pitch* kata “cendrawasih”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘cendrawasih’		
<i>Pitch minimum</i>	119.28910898779905 Hz	204.9397323578413 Hz
<i>Pitch maximum</i>	177.6165035392716 Hz	270.6920540613742 Hz
<i>Pitch quantile</i>	133.24063005703312 Hz	232.64206205354208 Hz
<i>Pitch mean</i>	136.32228602189235 Hz	233.36721655394183 Hz
<i>Pitch standar deviasi</i>	14.08450177975517 Hz	15.037229877617696 Hz

Tabel Lampiran 1.23 Analisis statistik *pitch* kata “nomor”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘nomor’		
<i>Pitch minimum</i>	137.63526370538594 Hz	237.83234562081458 Hz
<i>Pitch maximum</i>	154.50990049569165 Hz	259.2735572677306 Hz

<i>Pitch quantile</i>	148.22917195389473 Hz	249.78637005630287 Hz
<i>Pitch mean</i>	146.30377980202226 Hz	248.40951042834706 Hz
<i>Pitch standar deviasi</i>	5.51659992793388 Hz	6.786545471021529 Hz

Tabel Lampiran 1.24 Analisis statistik *pitch* kata “sembilan”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘sembilan’		
<i>Pitch minimum</i>	116.79974099372943 Hz	216.69910345638826 Hz
<i>Pitch maximum</i>	152.41113437737215 Hz	251.21026752134074 Hz
<i>Pitch quantile</i>	134.1437339258861 Hz	239.93628713785608 Hz
<i>Pitch mean</i>	133.50922708036134 Hz	238.24571563686695 Hz
<i>Pitch standar deviasi</i>	9.759852698612647 Hz	10.393958695384537 Hz

Tabel Lampiran 1.25 Analisis statistik *pitch* kata “belas”

Analisis Statistik	Suara Barang Bukti	Suara Subjek/Pembanding
Kata ‘belas’		
<i>Pitch minimum</i>	89.87384328827406 Hz	199.7700381654487 Hz
<i>Pitch maximum</i>	121.53948603349703 Hz	227.01080787547 Hz
<i>Pitch quantile</i>	112.80590411249604 Hz	220.20563583484974 Hz
<i>Pitch mean</i>	109.56948797329979 Hz	16.53843735847357 Hz
<i>Pitch standar deviasi</i>	9.767753210096238 Hz	8.780745125355766 Hz

Dari seluruh Tabel di atas hasil analisis statistik *pitch* terdapat perbedaan pada nilai statistik *pitch minimum*, *maximum*, *quantile/median* dan standar deviasi yang lebar antara rekaman suara barang bukti dan rekaman suara pembanding atau subjek, maka kesimpulan dari seluruh hasil di atas adalah TIDAK IDENTIK.

2. Analisis statistik *formant* dan *bandwidth*:

a. Analisis statistik Anova

Tabel Lampiran 2.1 Analisis statistik Anova kata “segera”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	88.1939	5.8172	3.94808	<i>Rejected</i>
<i>Formant 2</i>	95.3968	9.69641	3.94808	<i>Rejected</i>
<i>Formant 3</i>	203.5676	1.0081	3.94808	<i>Rejected</i>
<i>Formant 4</i>	205.3899	7.6372	3.94808	<i>Rejected</i>
<i>Formant 5</i>	5.6898	0.99401	4.08474	<i>Rejected</i>
<i>Bandwith 1</i>	1.04318	0.309849	3.94808	<i>Rejected</i>
<i>Bandwith 2</i>	0.0164	0.898375	3.94808	<i>Accepted</i>
<i>Bandwith 3</i>	16.1425	0.000122	3.94808	<i>Rejected</i>
<i>Bandwith 4</i>	7.55407	0.007249	3.94808	<i>Rejected</i>
<i>Bandwith 5</i>	8.9185	0.004801	4.08474	<i>Rejected</i>

Tabel Lampiran 2.2 Analisis statistik Anova kata “kirinkan”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	40.0042	6.30685	3.9315	<i>Rejected</i>
<i>Formant 2</i>	45.1204	9.81078	3.9315	<i>Rejected</i>
<i>Formant 3</i>	238.0227	9.45963	3.9315	<i>Rejected</i>
<i>Formant 4</i>	39.99005	1.146795	3.08201	<i>Rejected</i>
<i>Formant 5</i>	0.828947	0.36817	4.0912	<i>Rejected</i>
<i>Bandwith 1</i>	16.9031	7.8277894	3.9315	<i>Rejected</i>
<i>Bandwith 2</i>	6.359997	0.0131	3.9315	<i>Rejected</i>
<i>Bandwith 3</i>	4.563697	0.03497	3.9315	<i>Rejected</i>
<i>Bandwith 4</i>	21.9093	8.57228	3.9315	<i>Rejected</i>
<i>Bandwith 5</i>	9.6118	0.00358	4.0912	<i>Rejected</i>

Tabel Lampiran 2.3 Analisis statistik Anova kata “uang”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	56.0504	7.19436	3.95738	<i>Rejected</i>
<i>Formant 2</i>	2.77189	0.09974	3.95738	<i>Rejected</i>
<i>Formant 3</i>	12.2311	2.21114	3.106507	<i>Rejected</i>
<i>Formant 4</i>	63.7209	9.42856	3.96189	<i>Rejected</i>
<i>Formant 5</i>	1.7293	0.20702	4.49399	<i>Rejected</i>
<i>Bandwith 1</i>	1.4199	0.23685	3.95738	<i>Rejected</i>
<i>Bandwith 2</i>	1.01205	0.31737	3.95738	<i>Rejected</i>

<i>Bandwith 3</i>	1.590014	0.2108998	3.95738	<i>Rejected</i>
<i>Bandwith 4</i>	0.78559	0.37812	3.96189	<i>Rejected</i>
<i>Bandwith 5</i>	1.90655	0.18633	4.49399	<i>Rejected</i>

Tabel Lampiran 2.4 Analisis statistik Anova kata “ke”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	2.70083	0.106	4.01619	<i>Rejected</i>
<i>Formant 2</i>	1.0137	0.3184	4.01619	<i>Rejected</i>
<i>Formant 3</i>	6.46096	0.0138	4.01619	<i>Rejected</i>
<i>Formant 4</i>	25.9883	5.2967	4.034309	<i>Rejected</i>
<i>Formant 5</i>	0	1	4.49399	<i>Accepted</i>
<i>Bandwith 1</i>	7.1768	0.0097	4.01619	<i>Rejected</i>
<i>Bandwith 2</i>	0.37169	0.5445	4.01619	<i>Accepted</i>
<i>Bandwith 3</i>	12.6321	0.00078	4.01619	<i>Rejected</i>
<i>Bandwith 4</i>	7.1243	0.0102	4.034309	<i>Rejected</i>
<i>Bandwith 5</i>	0	1	4.49399	<i>Accepted</i>

Tabel Lampiran 2.5 Analisis statistik Anova kata “rekeningku”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	64.71464	9.06141	3.92433	<i>Rejected</i>
<i>Formant 2</i>	45.28993	7.16972	3.92433	<i>Rejected</i>
<i>Formant 3</i>	133.1589	7.0406	3.92433	<i>Rejected</i>
<i>Formant 4</i>	46.88696	4.2459	3.92583	<i>Rejected</i>
<i>Formant 5</i>	31.75854	4.3483	4.18296	<i>Rejected</i>
<i>Bandwith 1</i>	5.39236	0.02200048	3.92433	<i>Rejected</i>
<i>Bandwith 2</i>	25.9083	1.42578	3.92433	<i>Rejected</i>
<i>Bandwith 3</i>	12.6014	0.00056	3.92433	<i>Rejected</i>
<i>Bandwith 4</i>	9.07211	0.0032	3.92583	<i>Rejected</i>
<i>Bandwith 5</i>	0.258708	0.61485	4.18296	<i>Accepted</i>

Tabel Lampiran 2.6 Analisis statistik Anova kata “hari”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	6.9078	0.01162	4.051748	<i>Rejected</i>
<i>Formant 2</i>	14.9125	0.00035	4.051748	<i>Rejected</i>
<i>Formant 3</i>	25.224	8.1531	4.051748	<i>Rejected</i>
<i>Formant 4</i>	251.7754	2.7989	4.051748	<i>Rejected</i>
<i>Formant 5</i>	0	1	5.317655	<i>Accepted</i>
<i>Bandwith 1</i>	5.3176	0.00022	4.051748	<i>Rejected</i>
<i>Bandwith 2</i>	0.8785	0.3534	4.051748	<i>Rejected</i>

<i>Bandwith 3</i>	5.19473	0.0273	4.051748	<i>Rejected</i>
<i>Bandwith 4</i>	14.255	0.00045	4.051748	<i>Rejected</i>
<i>Bandwith 5</i>	0	1	5.317655	<i>Accepted</i>

Tabel Lampiran 2.7 Analisis statistik Anova kata “ini”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	315.7592	1.94713	3.990923	<i>Rejected</i>
<i>Formant 2</i>	38.3883	4.67248	3.990923	<i>Rejected</i>
<i>Formant 3</i>	60.1986	8.58416	3.990923	<i>Rejected</i>
<i>Formant 4</i>	66.4992	2.997097	4.003982	<i>Rejected</i>
<i>Formant 5</i>	0	1	4.747225	<i>Accepted</i>
<i>Bandwith 1</i>	0.030517	0.8618	3.990923	<i>Rejected</i>
<i>Bandwith 2</i>	1.20857	0.2757	3.990923	<i>Rejected</i>
<i>Bandwith 3</i>	7.26494	0.00897	3.990923	<i>Rejected</i>
<i>Bandwith 4</i>	0.21117	0.6475	4.003982	<i>Accepted</i>
<i>Bandwith 5</i>	0	1	4.747225	<i>Accepted</i>

Tabel Lampiran 2.8 Analisis statistik Anova kata “barang”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	20.2048	2.263638	3.957388	<i>Rejected</i>
<i>Formant 2</i>	26.1853	2.005825	3.957388	<i>Rejected</i>
<i>Formant 3</i>	26.49567	1.776294	3.957388	<i>Rejected</i>
<i>Formant 4</i>	4.8334	0.030915	3.965094	<i>Rejected</i>
<i>Formant 5</i>	0.2000095	0.657925	4.170876	<i>Accepted</i>
<i>Bandwith 1</i>	66.71404	3.247657	3.957388	<i>Rejected</i>
<i>Bandwith 2</i>	0.0496	0.824326	3.957388	<i>Accepted</i>
<i>Bandwith 3</i>	2.0399	0.157012	3.957388	<i>Rejected</i>
<i>Bandwith 4</i>	1.74005	0.191041	3.965094	<i>Rejected</i>
<i>Bandwith 5</i>	0.190995	0.665218	4.170876	<i>Accepted</i>

Tabel Lampiran 2.9 Analisis statistik Anova kata “sudah”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	12.7303	0.00073	4.009867	<i>Rejected</i>
<i>Formant 2</i>	45.0091	9.70754	4.009867	<i>Rejected</i>
<i>Formant 3</i>	167.5181	1.30314	4.009867	<i>Rejected</i>
<i>Formant 4</i>	98.4131	6.10468	4.012973	<i>Rejected</i>
<i>Formant 5</i>	0.93838	0.349132	4.600109	<i>Rejected</i>
<i>Bandwith 1</i>	5.31845	0.024758	4.009867	<i>Rejected</i>
<i>Bandwith 2</i>	1.7672	0.189024	4.009867	<i>Rejected</i>

<i>Bandwith 3</i>	12.742	0.000733	4.009867	<i>Rejected</i>
<i>Bandwith 4</i>	0.2605	0.61176	4.012973	<i>Accepted</i>
<i>Bandwith 5</i>	0.0006	0.980148	4.600109	<i>Accepted</i>

Tabel Lampiran 2.10 Analisis statistik Anova kata “ada”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	34.907693	1.01706009	3.972037	<i>Rejected</i>
<i>Formant 2</i>	28.315078	1.08630124	3.972037	<i>Rejected</i>
<i>Formant 3</i>	250.8897	2.53727809	3.972037	<i>Rejected</i>
<i>Formant 4</i>	58.1222	1.0561312	3.981896	<i>Rejected</i>
<i>Formant 5</i>	13.8425	0.0022825	4.600109	<i>Rejected</i>
<i>Bandwith 1</i>	31.628566	3.2369642	3.972037	<i>Rejected</i>
<i>Bandwith 2</i>	24.539336	4.5588543	3.972037	<i>Rejected</i>
<i>Bandwith 3</i>	18.874253	4.4366471	3.972037	<i>Rejected</i>
<i>Bandwith 4</i>	0.9096165	0.34359428	3.981896	<i>Accepted</i>
<i>Bandwith 5</i>	4.61809852	0.99467377	4.600109	<i>Rejected</i>

Tabel Lampiran 2.11 Analisis statistik Anova kata “kalau”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	17.80515	0.000105	4.03839	<i>Rejected</i>
<i>Formant 2</i>	11.63996	0.001302	4.03839	<i>Rejected</i>
<i>Formant 3</i>	271.8875	1.239498	4.03839	<i>Rejected</i>
<i>Formant 4</i>	21.43539	21.43539	4.03839	<i>Rejected</i>
<i>Formant 5</i>	0.748816	0.397646	4.38074	<i>Rejected</i>
<i>Bandwith 1</i>	0.890459	0.349982	4.03839	<i>Rejected</i>
<i>Bandwith 2</i>	2.919727	0.093830	4.03839	<i>Rejected</i>
<i>Bandwith 3</i>	5.487295	0.023095	4.03039	<i>Rejected</i>
<i>Bandwith 4</i>	12.40074	4.231509	3.182609	<i>Rejected</i>
<i>Bandwith 5</i>	0.00023	0.988074	4.380749	<i>Accepted</i>

Tabel Lampiran 2.12 Analisis statistik Anova kata “bisa”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.53327	0.46817	4.00687	<i>Accepted</i>
<i>Formant 2</i>	12.8885	0.00068	4.00687	<i>Rejected</i>
<i>Formant 3</i>	11.0602	0.00153	4.00687	<i>Rejected</i>
<i>Formant 4</i>	38.6343	5.99443	4.00687	<i>Rejected</i>
<i>Formant 5</i>	4.95105	0.03774	4.35124	<i>Rejected</i>
<i>Bandwith 1</i>	0.28164	0.59765	4.00687	<i>Accepted</i>
<i>Bandwith 2</i>	3.66109	0.06063	4.00687	<i>Rejected</i>

<i>Bandwith 3</i>	14.9945	0.00027	4.00687	<i>Rejected</i>
<i>Bandwith 4</i>	4.8154	0.03222	4.00687	<i>Rejected</i>
<i>Bandwith 5</i>	0.7965	0.38275	4.35124	<i>Rejected</i>

Tabel Lampiran 2.13 Analisis statistik Anova kata “sore”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	97.35033	2.109668	3.99336	<i>Rejected</i>
<i>Formant 2</i>	37.14581	7.319963	3.99336	<i>Rejected</i>
<i>Formant 3</i>	199.5044	3.423546	3.99336	<i>Rejected</i>
<i>Formant 4</i>	124.2559	1.52681	3.99336	<i>Rejected</i>
<i>Formant 5</i>	0.570495	0.45685	4.2252	<i>Rejected</i>
<i>Bandwith 1</i>	4.276674	0.04275	3.99336	<i>Rejected</i>
<i>Bandwith 2</i>	1.129615	0.29191	3.99336	<i>Rejected</i>
<i>Bandwith 3</i>	11.78767	0.001059	3.99336	<i>Rejected</i>
<i>Bandwith 4</i>	16.05761	0.000165	3.99336	<i>Rejected</i>
<i>Bandwith 5</i>	1.769938	0.194941	4.2252	<i>Rejected</i>

Tabel Lampiran 2.14 Analisis statistik Anova kata “ini”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	10.10183	0.0024517	4.01954	<i>Rejected</i>
<i>Formant 2</i>	0.007036	0.9334604	4.01954	<i>Rejected</i>
<i>Formant 3</i>	146.6989	5.0686725	4.01954	<i>Rejected</i>
<i>Formant 4</i>	363.6715	3.9655992	4.02663	<i>Rejected</i>
<i>Formant 5</i>	0	1	4.35124	<i>Accepted</i>
<i>Bandwith 1</i>	0.240086	0.626128	4.01954	<i>Accepted</i>
<i>Bandwith 2</i>	0.336551	0.564234	4.01954	<i>Accepted</i>
<i>Bandwith 3</i>	0.023001	0.880018	4.01954	<i>Accepted</i>
<i>Bandwith 4</i>	8.715837	0.004724	4.02663	<i>Rejected</i>
<i>Bandwith 5</i>	0	1	4.35124	<i>Accepted</i>

Tabel Lampiran 2.15 Analisis statistik Anova kata “datang”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	132.8493	3.3405601	3.95058	<i>Rejected</i>
<i>Formant 2</i>	26.36428	1.7067874	3.95058	<i>Rejected</i>
<i>Formant 3</i>	141.5516	6.099339	3.95058	<i>Rejected</i>
<i>Formant 4</i>	98.8852	5.256951	3.95058	<i>Rejected</i>
<i>Formant 5</i>	7.57623	0.009108	4.10545	<i>Rejected</i>
<i>Bandwith 1</i>	1.2186	0.27268	3.95058	<i>Rejected</i>
<i>Bandwith 2</i>	19.0222	3.5342045	3.95058	<i>Rejected</i>

<i>Bandwith 3</i>	2.93242	0.0903794	3.95058	<i>Rejected</i>
<i>Bandwith 4</i>	0.01331	0.908402	3.95058	<i>Accepted</i>
<i>Bandwith 5</i>	18.1084	0.000136	4.10545	<i>Rejected</i>

Tabel Lampiran 2.16 Analisis statistik Anova kata “ke”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	287.55487	1.705947	4.27934	<i>Rejected</i>
<i>Formant 2</i>	85.945657	3.127992	4.27934	<i>Rejected</i>
<i>Formant 3</i>	51.069797	2.809103	4.27934	<i>Rejected</i>
<i>Formant 4</i>	26.969013	3.304298	4.30094	<i>Rejected</i>
<i>Bandwith 1</i>	5.0138433	0.03511	4.27934	<i>Rejected</i>
<i>Bandwith 2</i>	0.5564418	0.46325	4.27934	<i>Rejected</i>
<i>Bandwith 3</i>	0.7682216	0.38983	4.27934	<i>Rejected</i>
<i>Bandwith 4</i>	0.0936259	0.762494	4.300949	<i>Accepted</i>

Tabel Lampiran 2.17 Analisis statistik Anova kata “rumah”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	13.0944	0.00060282	3.998494	<i>Rejected</i>
<i>Formant 2</i>	9.73243	0.00276399	3.998494	<i>Rejected</i>
<i>Formant 3</i>	37.51405	7.20158015	3.998494	<i>Rejected</i>
<i>Formant 4</i>	617.9848	1.37231027	4.016195	<i>Rejected</i>
<i>Formant 5</i>	23.14874	0.00296625	5.987377	<i>Rejected</i>
<i>Bandwith 1</i>	14.35993	0.00034808	3.998494	<i>Rejected</i>
<i>Bandwith 2</i>	4.110937	0.04698174	3.998494	<i>Rejected</i>
<i>Bandwith 3</i>	3.057258	0.08540806	3.998494	<i>Rejected</i>
<i>Bandwith 4</i>	5.347932	0.02451509	4.016195	<i>Rejected</i>
<i>Bandwith 5</i>	6.820852	0.04003034	5.987377	<i>Rejected</i>

Tabel Lampiran 2.18 Analisis statistik Anova kata “ambil”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	63.2156	4.048275	3.942303	<i>Rejected</i>
<i>Formant 2</i>	49.4571	3.223382	3.942303	<i>Rejected</i>
<i>Formant 3</i>	119.438	1.985987	3.942303	<i>Rejected</i>
<i>Formant 4</i>	20.1444	2.239428	3.953209	<i>Rejected</i>
<i>Formant 5</i>	14.5875	0.001509	4.493998	<i>Rejected</i>
<i>Bandwith 1</i>	0.86782	0.353944	3.942303	<i>Accepted</i>
<i>Bandwith 2</i>	46.1687	9.794739	3.942303	<i>Rejected</i>
<i>Bandwith 3</i>	14.9591	0.000202	3.942303	<i>Rejected</i>
<i>Bandwith 4</i>	3.98742	0.04904	3.953209	<i>Rejected</i>

<i>Bandwith 5</i>	0.83437	0.37457	4.493998	<i>Rejected</i>
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Tabel Lampiran 2.19 Analisis statistik Anova kata “barang”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	974.3699	4.909507	3.99336	<i>Rejected</i>
<i>Formant 2</i>	402.9277	4.552463	3.99336	<i>Rejected</i>
<i>Formant 3</i>	102.8434	7.228257	3.99336	<i>Rejected</i>
<i>Formant 4</i>	23.08455	1.02179	3.99588	<i>Rejected</i>
<i>Bandwith 1</i>	23.27305	9.28255	3.99336	<i>Rejected</i>
<i>Bandwith 2</i>	23.08737	9.96074	3.99336	<i>Rejected</i>
<i>Bandwith 3</i>	4.432075	0.03926	3.99336	<i>Rejected</i>
<i>Bandwith 4</i>	0.101033	0.75166	3.99588	<i>Accepted</i>

Tabel Lampiran 2.20 Analisis statistik Anova kata “di”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	144.871	1.28892	4.35124	<i>Rejected</i>
<i>Formant 2</i>	50.9805	6.44639	4.35124	<i>Rejected</i>
<i>Formant 3</i>	289.5209	2.30435	4.35124	<i>Rejected</i>
<i>Formant 4</i>	26.45741	8.12176	4.45132	<i>Rejected</i>
<i>Bandwith 1</i>	4.53265	0.0231	3.4668001	<i>Rejected</i>
<i>Bandwith 2</i>	2.79247	0.08406	3.4668001	<i>Rejected</i>
<i>Bandwith 3</i>	5.45333	0.03006	4.35124	<i>Rejected</i>
<i>Bandwith 4</i>	1.73114	0.20573	4.45132	<i>Rejected</i>

Tabel Lampiran 2.21 Analisis statistik Anova kata “jalan”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	64.61713	1.229955	4.10545	<i>Rejected</i>
<i>Formant 2</i>	19.43604	8.612742	4.10545	<i>Rejected</i>
<i>Formant 3</i>	58.46165	3.976342	4.10545	<i>Rejected</i>
<i>Formant 4</i>	93.48998	2.030206	4.12133	<i>Rejected</i>
<i>Formant 5</i>	26.12212	0.000917	5.31765	<i>Rejected</i>
<i>Bandwith 1</i>	8.724158	0.005431	4.10545	<i>Rejected</i>
<i>Bandwith 2</i>	8.846171	0.005146	4.10545	<i>Rejected</i>
<i>Bandwith 3</i>	4.239258	0.04659	4.10545	<i>Rejected</i>
<i>Bandwith 4</i>	2.533652	0.12043	4.12133	<i>Rejected</i>
<i>Bandwith 5</i>	0.012532	0.91362	5.31765	<i>Accepted</i>

Tabel Lampiran 2.22 Analisis statistik Anova kata “cendrawasih”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	4.459025	0.036261	3.89986	<i>Rejected</i>
<i>Formant 2</i>	24.91924	1.539334	3.89986	<i>Rejected</i>
<i>Formant 3</i>	168.6602	7.691272	3.89986	<i>Rejected</i>
<i>Formant 4</i>	115.5255	1.744898	3.90215	<i>Rejected</i>
<i>Formant 5</i>	0.001009	0.975131	4.66719	<i>Accepted</i>
<i>Bandwith 1</i>	14.33964	0.000215	3.89986	<i>Rejected</i>
<i>Bandwith 2</i>	16.97878	6.033111	3.89986	<i>Rejected</i>
<i>Bandwith 3</i>	6.497277	0.011738	3.89986	<i>Rejected</i>
<i>Bandwith 4</i>	4.903407	0.028263	3.90215	<i>Rejected</i>
<i>Bandwith 5</i>	0.493143	0.49491	4.66719	<i>Rejected</i>

Tabel Lampiran 2.23 Analisis statistik Anova kata “nomor”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	119.606	1.490658	3.96035	<i>Rejected</i>
<i>Formant 2</i>	252.649	1.783251	3.96035	<i>Rejected</i>
<i>Formant 3</i>	20.9589	1.697903	3.96035	<i>Rejected</i>
<i>Formant 4</i>	118.828	1.74506	3.96035	<i>Rejected</i>
<i>Formant 5</i>	51.9275	3.48812	4.14909	<i>Rejected</i>
<i>Bandwith 1</i>	12.0587	0.00083	3.96035	<i>Rejected</i>
<i>Bandwith 2</i>	17.8878	6.1862	3.96035	<i>Rejected</i>
<i>Bandwith 3</i>	2.24654	0.13785	3.96035	<i>Rejected</i>
<i>Bandwith 4</i>	4.416781	0.03873	3.96035	<i>Rejected</i>
<i>Bandwith 5</i>	0.647374	0.42699	4.14909	<i>Rejected</i>

Tabel Lampiran 2.24 Analisis statistik Anova kata “sembilan”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	163.0812	1.6955	4.00687	<i>Rejected</i>
<i>Formant 2</i>	24.7128	6.2353	4.00687	<i>Rejected</i>
<i>Formant 3</i>	47.3421	4.6506	4.00687	<i>Rejected</i>
<i>Formant 4</i>	15.5327	0.00025	4.0343	<i>Rejected</i>
<i>Bandwith 1</i>	18.3296	7.06146	4.0068	<i>Rejected</i>
<i>Bandwith 2</i>	2.92437	0.09259	4.00687	<i>Rejected</i>
<i>Bandwith 3</i>	12.1197	0.00095	4.00687	<i>Rejected</i>
<i>Bandwith 4</i>	1.45765	0.23298	4.0343	<i>Rejected</i>

Tabel Lampiran 2.25 Analisis statistik Anova kata “belas”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	65.3031	3.08659	4.0617	<i>Rejected</i>
<i>Formant 2</i>	457.5581	7.00909	4.0617	<i>Rejected</i>
<i>Formant 3</i>	163.5952	2.01438	4.0617	<i>Rejected</i>
<i>Formant 4</i>	71.30963	9.36204	4.0617	<i>Rejected</i>
<i>Formant 5</i>	39.6158	0.00148	6.6078	<i>Rejected</i>
<i>Bandwith 1</i>	3.87387	0.05536	4.0617	<i>Rejected</i>
<i>Bandwith 2</i>	11.4202	0.00153	4.0617	<i>Rejected</i>
<i>Bandwith 3</i>	1.17185	0.31906	3.2043	<i>Rejected</i>
<i>Bandwith 4</i>	4.58605	0.037809	4.0617	<i>Rejected</i>
<i>Bandwith 5</i>	47.4173	0.00098	6.6078	<i>Rejected</i>

Berdasarkan seluruh Tabel di atas disimpulkan bahwa nilai *formant* 1, 2,3,4, 5 dan *Bandwidth* pada pengucapan kata “ke”, “ini”, “barang”, “bisa” dan “ini” dinyatakan IDENTIK sedangkan Tabel lainnya TIDAK IDENTIK.

b. Analisis Likelihood Ratio (LR)

Tabel Lampiran 2.26 Analisis Likelihood ratio pada kata “segera”

Formant kata ‘segera’	P-value = $p(E H_p)$	$p(E H_d)$	LR	Verbal Statement
F1	5.81723	-4.81723	-1.20871	<i>Very strong evidence against</i>
F2	9.69641	-8.69641	-1.11498	<i>Very strong evidence against</i>
F3	1.008104	0.008104	124.3954	<i>Moderately strong evidence to support</i>
F4	7.637205	-6.637205	-1.15066	<i>Very strong evidence against</i>
F5	0.994019	0.00598	166.19735	<i>Moderately strong evidence to support</i>
B1	0.30985	0.069015	4.4896	<i>Limited evidence to support</i>
B2	0.89837	0.101624	8.84011	<i>Limited evidence to support</i>
B3	0.00012	0.999877	1.22591	<i>Limited evidence to support</i>
B4	0.00725	0.99275	0.0073	<i>Strong evidence against</i>
B5	0.004801	0.995198	0.0048	<i>Strong evidence against</i>

Tabel Lampiran 2.27 Analisis *Likelihood ratio* pada kata “kirimkan”

Formant kata ‘kirimkan’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	6.30685	-5.30685	-1.1884	<i>Very strong evidence to against</i>
F2	9.81078	-8.81078	-1.11349	<i>Very strong evidence to against</i>
F3	9.459638	-8.459638	-1.118208	<i>Very strong evidence to against</i>
F4	1.146795	0.146795	7.812196	<i>Limited evidence to support</i>
F5	0.36817	0.6318299	0.582704	<i>Moderate evidence against</i>
B1	7.82779	-6.827789	-1.14646	<i>Very strong evidence to against</i>
B2	0.01317	0.986826	0.01335	<i>Moderately strong evidence to against</i>
B3	0.03497	0.96502009	0.03624	<i>Moderately strong evidence to against</i>
B4	8.57228	-7.572283	1.13206	<i>Limited evidence to support</i>
B5	0.0035	0.996418	0.003594	<i>Strong evidence against</i>

Tabel Lampiran 2.28 Analisis *Likelihood ratio* pada kata “uang”

Formant kata ‘uang’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	7.194366	-6.19436	-1.161437	<i>Very strong evidence to against</i>
F2	0.09975	0.90025	0.110801	<i>Moderate evidence to against</i>
F3	2.21114	1.21114	1.82566	<i>Limited evidence to support</i>
F4	9.42856	8.42856	1.11864	<i>Limited evidence to support</i>
F5	0.2070287	0.792971	0.261079	<i>Moderate evidence to against</i>
B1	0.236855	0.763144	0.310367	<i>Moderate evidence to against</i>
B2	0.317369	0.68263	0.464922	<i>Moderate evidence to against</i>
B3	0.210899	0.7891001	0.26726	<i>Moderate evidence to against</i>
B4	0.378124	0.621875	0.60803	<i>Moderate evidence to against</i>

B5	0.18633	0.8136695	0.2290001	<i>Moderate evidence to against</i>
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Tabel Lampiran 2.29 Analisis *Likelihood ratio* pada kata “ke”

Formant kata ‘ke-’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.1060009	0.893999	0.118569	<i>Moderate evidence to against</i>
F2	0.3184148	0.681585	0.467168	<i>Moderate evidence to against</i>
F3	0.0138745	0.986125	0.014069	<i>Moderately strong evidence to against</i>
F4	5.29672	-4.29672	1.23273	<i>Limited evidence to support</i>
F5	1	0	Tidak terdefinisi	<i>Undefined</i>
B1	0.009721	0.99027	0.0098	<i>Strong evidence to against</i>
B2	0.54459	0.455406	1.195841	<i>Limited evidence to support</i>
B3	0.00078	0.999212	7.882605	<i>Limited evidence to support</i>
B4	0.01022	0.989772	0.010333	<i>Moderately strong evidence to against</i>
B5	1	0	Tidak terdefinisi	<i>Undefined</i>

Tabel Lampiran 2.30 Analisis *Likelihood ratio* pada kata “rekeningku”

Formant kata ‘rekeningku’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	9.06141699	-8.06141	-1.12404	<i>Very strong evidence to against</i>
F2	7.1697197	-6.16971	-1.16208	<i>Very strong evidence to against</i>
F3	7.0406082	-6.0406	-1.16554	<i>Very strong evidence to against</i>
F4	4.2459132	-3.24591	-1.30807	<i>Very strong evidence to against</i>
F5	4.3483215	-3.34832	-1.298657	<i>Very strong evidence to against</i>
B1	0.0220004	0.97799	0.02249	<i>Moderately strong evidence to against</i>

B2	1.42579596	0.42579	3.34854	<i>Limited evidence to support</i>
B3	0.000561	0.99943	5.61494	<i>Limited evidence to support</i>
B4	0.003208	0.9967	0.003219	<i>Moderately strong evidence to against</i>
B5	0.614856	0.38514	1.59643	<i>Limited evidence to support</i>

Tabel Lampiran 2.31 Analisis *Likelihood ratio* pada kata “hari”

Formant kata ‘hari’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.011625	0.9883746	0.011762	<i>Moderately strong evidence to against</i>
F2	0.00035	0.9996497	3.504013	<i>Limited evidence to support</i>
F3	8.153131	-7.153131	-1.1397989	<i>Very strong evidence to against</i>
F4	2.798904	-1.798904	-1.555894	<i>Very strong evidence to against</i>
F5	1	0	Tidak terdefinisi	<i>Undefined</i>
B1	0.0002273	0.999772	2.273849	<i>Limited evidence to support</i>
B2	0.3534856	0.646514	0.5467551	<i>Moderate evidence to against</i>
B3	0.0273425	0.972657	0.028111	<i>Moderately strong evidence to against</i>
B4	0.0004563	0.999543	4.565176	<i>Limited evidence to support</i>
B5	1	0	Tidak terdefinisi	<i>Undefined</i>

Tabel Lampiran 2.32 Analisis *Likelihood ratio* pada kata “ini”

Formant kata ‘ini’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	1.947138	0.9471385	2.0558117	<i>Limited evidence to support</i>
F2	4.672483	-3.672483	-1.272295	<i>Very strong evidence to against</i>
F3	8.584162	-7.584162	-1.131853	<i>Very strong evidence to against</i>
F4	2.997097	-1.9970973	-1.500726	<i>Very strong evidence to against</i>

F5	1	0	Tidak tedefinisi	<i>Undefined</i>
B1	0.861873	0.13812608	6.239762	<i>Limited evidence to support</i>
B2	0.275733	0.7242663	0.380707	<i>Moderate evidence to against</i>
B3	0.008972	0.9910275	0.009053	<i>Strong evidence to against</i>
B4	0.6475405	0.3524594	1.837205	<i>Limited evidence to support</i>
B5	1	0	Tidak terdefinisi	<i>Undefined</i>

Tabel Lampiran 2.33 Analisis *Likelihood ratio* pada kata “barang”

Formant kata ‘barang’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	2.26363	-1.263637	-1.79136	<i>Very strong evidence to against</i>
F2	2.00582	-1.00582	-1.9942	<i>Very strong evidence to against</i>
F3	1.776294	0.77629	2.28817	<i>Limited evidence to support</i>
F4	0.0309152	0.96908	0.0319	<i>Moderately strong evidence to against</i>
F5	0.6579255	0.34207	1.92334	<i>Limited evidence to support</i>
B1	3.247657	-2.247657	-1.4449	<i>Very strong evidence to against</i>
B2	0.824326	0.175673	4.69236	<i>Limited evidence to support</i>
B3	0.157012	0.842987	0.18625	<i>Moderate evidence to against</i>
B4	0.1910409	0.808959	0.23615	<i>Moderate evidence to against</i>
B5	0.6652187	0.3347812	1.98702	<i>Limited evidence to support</i>

Tabel Lampiran 2.34 Analisis *Likelihood ratio* pada kata “sudah”

Formant kata ‘sudah’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.000737	0.9992622	7.383054	<i>Limited evidence to support</i>
F2	9.707546	-8.707546	-1.114842	<i>Very strong evidence to against</i>

F3	1.303141	0.303141	4.298785	<i>Limited evidence to support</i>
F4	6.104684	-5.104684	-1.195898	<i>Very strong evidence to against</i>
F5	0.349131	0.65086	0.536415	<i>Moderate evidence to against</i>
B1	0.024758	0.9752413	0.025387	<i>Moderately strong evidence to against</i>
B2	0.1890242	0.8109757	0.23308	<i>Moderate evidence to against</i>
B3	0.0007337	0.9992662	7.343012	<i>Limited evidence to support</i>
B4	0.6117591	0.3882408	1.57572	<i>Limited evidence to support</i>
B5	0.9801484	0.0198515	49.3738	<i>Moderate evidence to support</i>

Tabel Lampiran 2.35 Analisis *Likelihood ratio* pada kata “ada”

Formant kata ‘ada’	P-value = $p(E H_p)$	$p(E H_d)$	LR	Verbal Statement
F1	1.01706	0.01706	59.61632	<i>Moderate evidence to support</i>
F2	1.0863	0.0863	12.587319	<i>Moderate evidence to support</i>
F3	2.537278	-1.53727	-1.6505003	<i>Very strong evidence to against</i>
F4	1.056131	0.05613	18.815403	<i>Moderate evidence to support</i>
F5	0.002282	0.99771	0.0022877	<i>Strong evidence to against</i>
B1	3.236964	-2.23696	-1.447034	<i>Very strong evidence to against</i>
B2	4.558854	-3.55885	-1.28098	<i>Very strong evidence to against</i>
B3	4.436647	-3.436647	-1.29098	<i>Very strong evidence to against</i>
B4	0.343594	0.656405	0.52344	<i>Moderate evidence to against</i>
B5	0.994673	0.0053	186.7502	<i>Moderately strong evidence to support</i>

Tabel Lampiran 2.36 Analisis *Likelihood ratio* pada kata “kalau”

Formant kata ‘kalau’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.0001053	0.99989	1.053874	<i>Limited evidence to support</i>
F2	0.001302	0.998697	0.001303	<i>Strong evidence to against</i>
F3	1.23949	0.239498	5.17539	<i>Limited evidence to support</i>
F4	21.43539	-20.4353	-1.04893	<i>Very strong evidence to against</i>
F5	0.397646	0.602353	0.66015	<i>Moderate evidence to against</i>
B1	0.349982	0.650017	0.53842	<i>Moderate evidence to against</i>
B2	0.09383	0.906169	0.10354	<i>Moderate evidence to against</i>
B3	0.023095	0.976904	0.02364	<i>Moderately strong evidence to against</i>
B4	4.231509	-3.231509	-1.3094	<i>Very strong evidence to against</i>
B5	0.988074	0.011925	82.855	<i>Moderate evidence to support</i>

Tabel Lampiran 2.37 Analisis *Likelihood ratio* pada kata “bisa”

Formant kata ‘bisa’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.46817	0.53182	0.8803	<i>Moderate evidence to support</i>
F2	0.00068	0.99931	6.81462	<i>Limited evidence to support</i>
F3	0.00153	0.99846	0.00153	<i>Strong evidence to support</i>
F4	5.99443	-4.99443	-1.2002	<i>Very strong evidence to against</i>
F5	0.03774	0.96225	0.0392	<i>Moderately strong evidence to support</i>
B1	0.59765	0.40234	1.4854	<i>Limited evidence to support</i>
B2	0.06063	0.93936	0.0645	<i>Moderately strong evidence to support</i>
B3	0.00027	0.99972	2.76407	<i>Limited evidence to support</i>

B4	0.03222	0.96777	0.0332	<i>Moderately strong evidence to support</i>
B5	0.38275	0.61724	0.6201	<i>Moderate evidence to support</i>

Tabel Lampiran 2.38 Analisis *Likelihood ratio* pada kata “sore”

Formant kata ‘sore’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	2.10966	-1.10966	-1.90117	<i>Very strong evidence to against</i>
F2	7.31996	-6.31996	-1.15822	<i>Very strong evidence to against</i>
F3	3.42354	-2.42354	-1.41261	<i>Very strong evidence to against</i>
F4	1.52681	0.52681	2.89821	<i>Limited evidence to support</i>
F5	0.45685	0.54314	0.84111	<i>Moderate evidence to against</i>
B1	0.04275	0.95725	0.04465	<i>Moderately strong evidence to against</i>
B2	0.29191	0.70808	0.41225	<i>Moderate evidence to against</i>
B3	0.00105	0.99894	0.00106	<i>Strong evidence to against</i>
B4	0.00016	0.99983	1.65033	<i>Limited evidence to support</i>
B5	0.19494	0.80505	0.24214	<i>Moderate evidence to against</i>

Tabel Lampiran 2.39 Analisis *Likelihood ratio* pada kata “ini”

Formant kata ‘ini’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.002451	0.997548	0.00245	<i>Strong evidence to against</i>
F2	0.93346	0.066539	14.0286	<i>Moderate evidence to support</i>
F3	5.068672	-4.06867	-1.24578	<i>Very strong evidence to against</i>
F4	3.96559	-2.9655	-1.337199	<i>Very strong evidence to against</i>
F5	1	0	1	<i>Very strong evidence to against</i>

B1	0.6261287	0.37387	1.67471	<i>Limited evidence to support</i>
B2	0.56423	0.43576	1.29483	<i>Limited evidence to support</i>
B3	0.880018	0.119981	7.3346	<i>Limited evidence to support</i>
B4	0.004724	0.99527	0.00474	<i>Moderately strong evidence to against</i>
B5	1	0	Tidak terdefinisi	<i>Undefined</i>

Tabel Lampiran 2.40 Analisis *Likelihood ratio* pada kata “datang”

Formant kata ‘datang’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	3.34056	-2.3405	-1.4272	<i>Very strong evidence to against</i>
F2	1.70678	0.70678	2.41485	<i>Limited evidence to support</i>
F3	6.09933	-5.0993	-1.1961	<i>Very strong evidence to against</i>
F4	5.256951	-4.25695	-1.2349	<i>Very strong evidence to against</i>
F5	0.009108	0.99089	0.00919	<i>Strong evidence against</i>
B1	0.27268	0.72731	0.37491	<i>Moderate evidence to against</i>
B2	3.5342	-2.534204	-1.3946	<i>Very strong evidence to against</i>
B3	0.09037	0.90962	0.0993	<i>Moderately strong evidence to against</i>
B4	0.908401	0.09159	9.9172	<i>Limited evidence to support</i>
B5	0.00013	0.99986	1.36579	<i>Limited evidence to support</i>

Tabel Lampiran 2.41 Analisis *Likelihood ratio* pada kata “ke”

Formant kata ‘ke’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	1.705946	0.705946	2.416537	<i>Limited evidence to support</i>
F2	3.127992	-2.12799	-1.46992	<i>Very strong evidence to against</i>
F3	2.809103	-1.8091	-1.55276	<i>Very strong evidence to against</i>
F4	3.304298	-2.304298	-1.433971	<i>Very strong evidence to against</i>
B1	0.03511	0.9648899	0.03638	<i>Moderately strong evidence to against</i>

B2	0.463253	0.536746	0.86307	<i>Moderate evidence to against</i>
B3	0.38983	0.610169	0.63888	<i>Moderate evidence to against</i>
B4	0.762493	0.237506	3.21042	<i>Limited evidence to support</i>

Tabel Lampiran 2.42 Analisis *Likelihood ratio* pada kata “rumah”

Formant kata ‘rumah’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.0006	0.999397	6.03192	<i>Limited evidence to support</i>
F2	0.0027	0.997236	0.00277	<i>Strong evidence to against</i>
F3	7.20158	-6.20158	-1.16124	<i>Very strong evidence to against</i>
F4	1.37231	0.37231	3.68593	<i>Limited evidence to support</i>
F5	0.00296	0.99703	0.00297	<i>Strong evidence to against</i>
B1	0.00034	0.999652	3.48204	<i>Limited evidence to support</i>
B2	0.04698	0.953018	0.04929	<i>Moderately strong evidence to against</i>
B3	0.085408	0.914591	0.09338	<i>Moderately strong evidence to against</i>
B4	0.024515	0.975484	0.02513	<i>Moderately strong evidence to against</i>
B5	0.04003	0.95996	0.04169	<i>Moderately strong evidence to against</i>

Tabel Lampiran 2.43 Analisis *Likelihood ratio* pada kata “ambil”

Formant kata ‘ambil’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	4.048275	-3.048275	-1.32805	<i>Very strong evidence to against</i>
F2	3.223382	-2.223382	-1.44976	<i>Very strong evidence to against</i>
F3	1.985987	0.9859871	2.014211	<i>Limited evidence to support</i>
F4	2.239428	-1.239428	-1.8068	<i>Very strong evidence to against</i>
F5	0.0015098	0.99849	0.00151	<i>Strong evidence to against</i>
B1	0.353944	0.64605	0.54785	<i>Moderate evidence to against</i>

B2	9.79473	-8.794739	-1.1137	<i>Very strong evidence to against</i>
B3	0.000202	0.999797	2.02409	<i>Limited evidence to support</i>
B4	0.04904	0.95095	0.0515	<i>Moderately strong evidence to against</i>
B5	0.37457	0.62542	0.5989	<i>Moderate evidence to against</i>

Tabel Lampiran 2.44 Analisis *Likelihood ratio* pada kata “barang”

Formant kata 'barang'	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	4.9095	-3.9095	-1.25578	<i>Very strong evidence to against</i>
F2	4.55246	-3.5524	-1.28149	<i>Very strong evidence to against</i>
F3	7.22825	-6.22825	-1.160558	<i>Very strong evidence to against</i>
F4	1.02179	0.02179	46.89105	<i>Moderate evidence to support</i>
B1	9.28255	-8.28255	-1.12735	<i>Very strong evidence to against</i>
B2	9.96074	-8.96074	-1.11159	<i>Very strong evidence to against</i>
B3	0.03926	0.960737	0.04086	<i>Moderately strong evidence to against</i>
B4	0.75166	0.24833	3.0267	<i>Limited evidence to support</i>

Tabel Lampiran 2.45 Analisis *Likelihood ratio* pada kata “di”

Formant kata 'di'	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	1.28892	0.28892	4.46115	<i>Limited evidence to support</i>
F2	6.44639	-5.44639	-1.1836	<i>Very strong evidence to against</i>
F3	2.304351	-1.30435	-1.7666	<i>Very strong evidence to against</i>

F4	8.12176	-7.12176	-1.14041	<i>Very strong evidence to against</i>
B1	0.0231	0.976899	0.02364	<i>Moderately strong evidence to against</i>
B2	0.08406	0.915932	0.09178	<i>Moderately strong evidence to against</i>
B3	0.03006	0.969937	0.03099	<i>Moderately strong evidence to against</i>
B4	0.20573	0.794266	0.25902	<i>Moderate evidence to against</i>

Tabel Lampiran 2.46 Analisis *Likelihood ratio* pada kata “jalan”

Formant kata ‘jalan’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	1.22995	0.2299555	5.348666	<i>Limited evidence to against</i>
F2	8.612742	-7.612742	-1.13135	<i>Very strong evidence to against</i>
F3	3.976342	-2.976342	-1.33598	<i>Very strong evidence to against</i>
F4	2.030206	-1.030206	-1.970678	<i>Very strong evidence to against</i>
F5	0.000917	0.99908	9.18175	<i>Limited evidence to support</i>
B1	0.00543	0.99456	0.00546	<i>Strong evidence to against</i>
B2	0.00514	0.9948	0.00517	<i>Strong evidence to against</i>
B3	0.04659	0.9534	0.0488	<i>Moderately strong evidence to against</i>
B4	0.12043	0.8795	0.13692	<i>Moderate evidence to against</i>
B5	0.913623	0.086376	10.5771	<i>Moderate evidence to support</i>

Tabel Lampiran 2.47 Analisis *Likelihood ratio* pada kata “cendrawasih”

Formant kata ‘cendrawasih’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.03626	0.96373	0.03762	<i>Moderately strong evidence to against</i>

F2	1.53933	0.539334	2.85413	<i>Limited evidence to support</i>
F3	7.691272	-6.691272	-1.14944	<i>Very strong evidence to against</i>
F4	1.74489	0.744898	2.34246	<i>Limited evidence to support</i>
F5	0.97513	0.02486	39.2117	<i>Moderate evidence to support</i>
B1	0.000215	0.99978	2.151502	<i>Limited evidence to support</i>
B2	6.033111	-5.0331	-1.1986	<i>Very strong evidence to against</i>
B3	0.01173	0.98826	0.01187	<i>Moderately strong evidence to against</i>
B4	0.02826	0.9717367	0.02908	<i>Moderately strong evidence to against</i>
B5	0.49491	0.50508	0.97984	<i>Moderate evidence to against</i>

Tabel Lampiran 2.48 Analisis *Likelihood ratio* pada kata “nomor”

Formant kata ‘nomor’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	1.49065	0.49065	3.03807	<i>Limited evidence to support</i>
F2	1.78325	0.783251	2.27672	<i>Limited evidence to support</i>
F3	1.6979	0.6979	2.432862	<i>Limited evidence to support</i>
F4	1.745062	0.7450623	2.342169	<i>Limited evidence to support</i>
F5	3.48812	-2.48812	-1.401908	<i>Very strong evidence to against</i>
B1	0.00083	0.99916	8.3519	<i>Limited evidence to support</i>
B2	6.1862	-5.1862	-1.1928	<i>Very strong evidence to against</i>
B3	0.13784	0.86215	0.15989	<i>Moderate evidence to support</i>
B4	0.03873	0.961266	0.04029	<i>Moderately strong evidence to against</i>
B5	0.42699	0.573009	0.74517	<i>Moderate evidence to against</i>

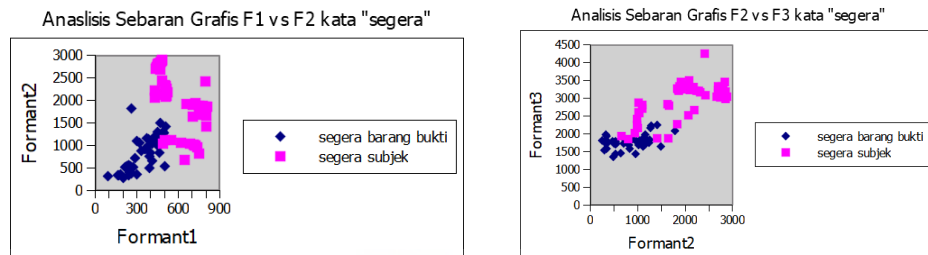
Tabel Lampiran 2.49 Analisis *Likelihood ratio* pada kata “sembilan”

Formant kata ‘sembilan’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	1.6955	0.6955	2.437813	Limited evidence to support
F2	6.23533	-5.23533	-1.191009	Very strong evidence to against
F3	4.6506	-3.6506003	-1.2739	Very strong evidence to against
F4	0.00025	0.999747	2.5238	Limited evidence to support
B1	7.06146	-6.061462	-1.16497	Very strong evidence to against
B2	0.09259	0.90740	0.10204	Moderate evidence to against
B3	0.00095	0.99904	9.55729	Limited evidence to support
B4	0.232985	0.7670149	0.30375	Moderate evidence to against

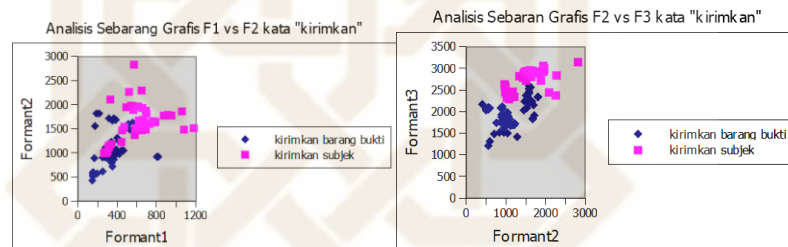
Tabel Lampiran 2.50 Analisis *Likelihood ratio* pada kata “belas”

Formant kata ‘belas’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	3.08659	-2.0866	-1.47925	Very strong evidence to against
F2	7.009096	-6.00909	-1.1664	Very strong evidence to against
F3	2.0143845	-1.014384	-1.9858	Very strong evidence to against
F4	9.3620454	-8.362045	-1.1195	Very strong evidence to against
F5	0.00148	0.99851	0.00149	Strong evidence to against
B1	0.05536	0.94463	0.058609	Moderately strong evidence to against
B2	0.00153	0.99846	0.00153	Strong evidence to against
B3	0.31906	0.68093	0.46857	Moderate evidence to against
B4	0.0378	0.96219	0.039294	Moderately strong evidence to against
B5	0.000988588 97834	0.99901141 102166	9.89567253 6202	Limited evidence to support

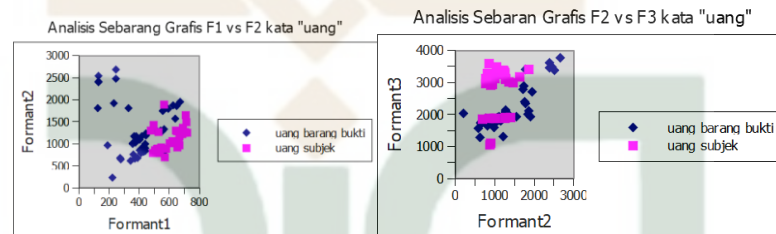
3. Analisis *Graphical Distribution*



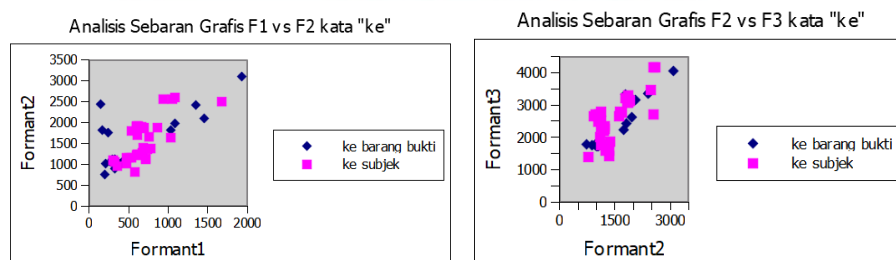
Gambar Lampiran 3.1 Analisis sebaran grafis pada kata "segera"



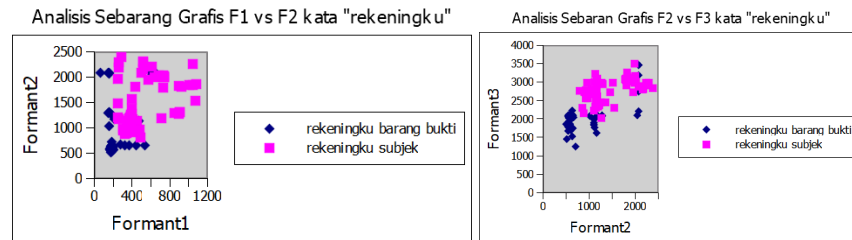
Gambar Lampiran 3.2 Analisis sebaran grafis pada kata "kirirkan"



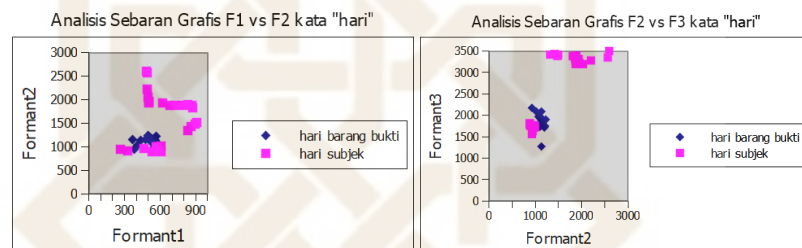
Gambar Lampiran 3.3 Analisis sebaran grafis pada kata "uang"



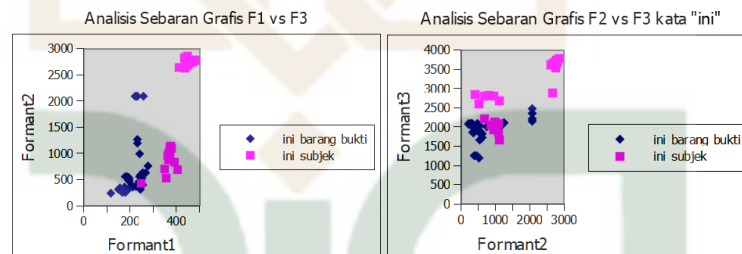
Gambar Lampiran 3.4 Analisis sebaran grafis pada kata "ke"



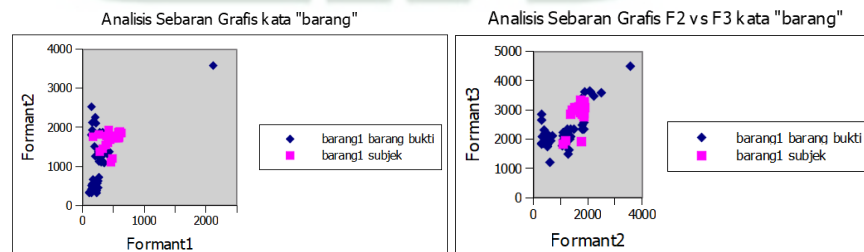
Gambar Lampiran 3.5 Analisis sebaran grafis pada kata "rekeningku"



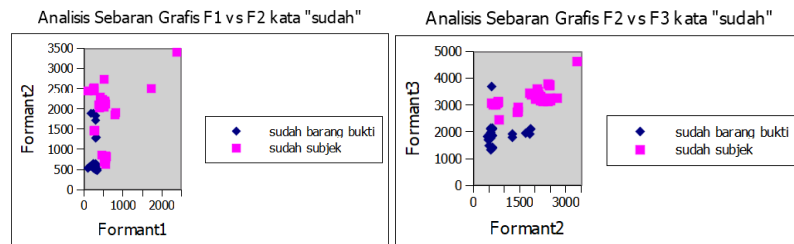
Gambar Lampiran 3.6 Analisis sebaran grafis pada kata "hari"



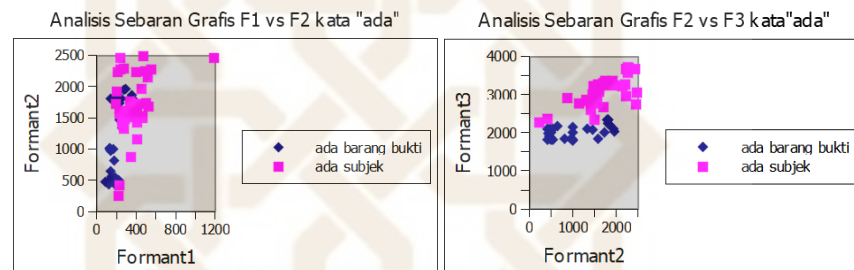
Gambar Lampiran 3.7 Analisis sebaran grafis pada kata "ini"



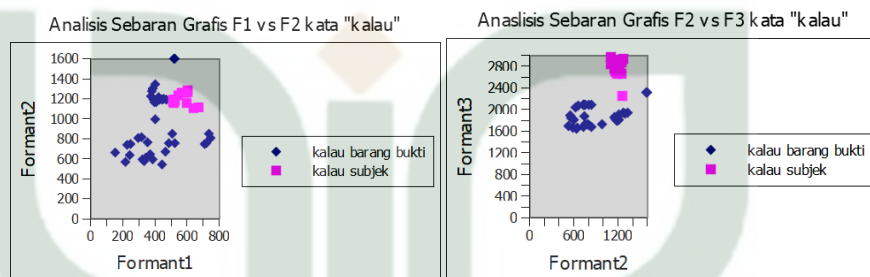
Gambar Lampiran 3.8 Analisis sebaran grafis pada kata "barang"



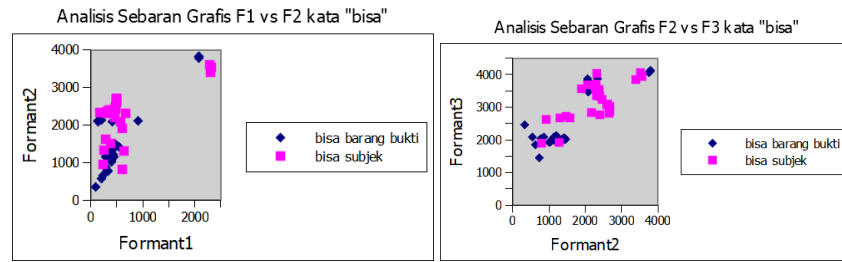
Gambar Lampiran 3.9 Analisis sebaran grafis pada kata “sudah”



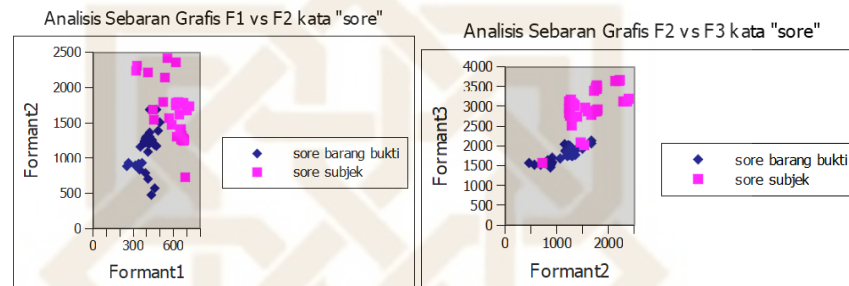
Gambar Lampiran 3.10 Analisis sebaran grafis pada kata “ada”



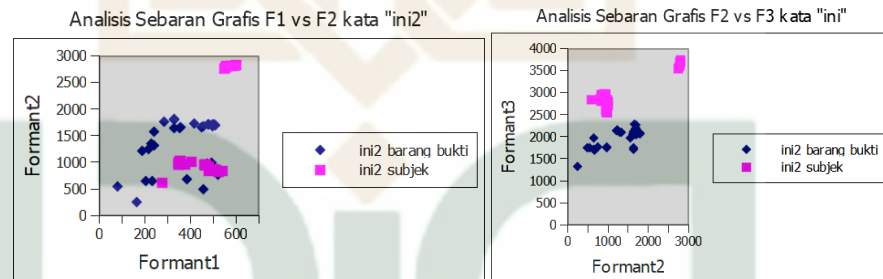
Gambar Lampiran 3.11 Analisis sebaran grafis pada kata “kalau”



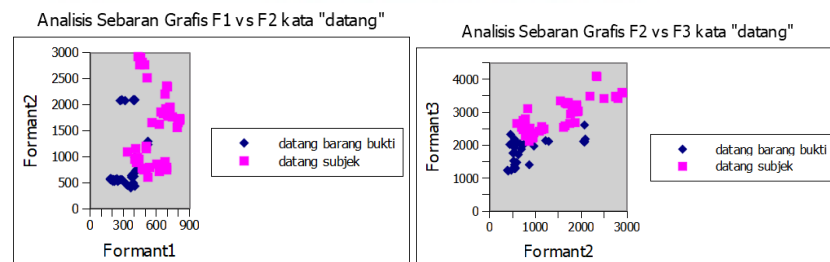
Gambar Lampiran 3.12 Analisis sebaran grafis pada kata "bisa"



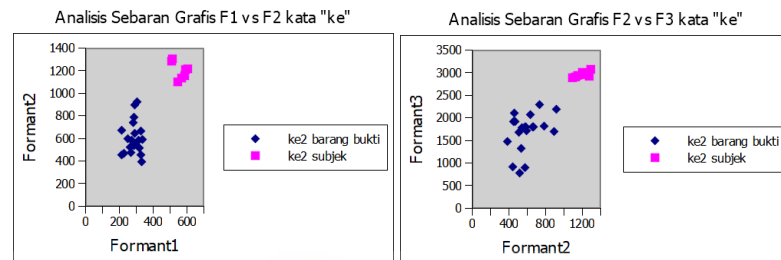
Gambar Lampiran 3.13 Analisis sebaran grafis pada kata "sore"



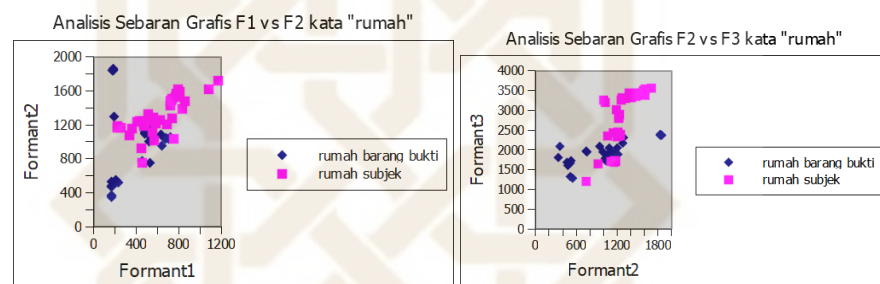
Gambar Lampiran 3.14 Analisis sebaran grafis pada kata "ini"



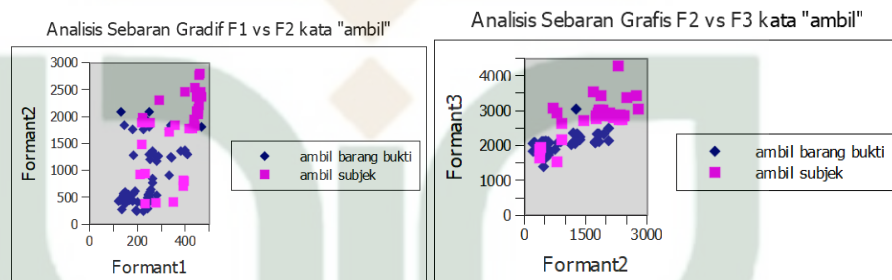
Gambar Lampiran 3.15 Analisis sebaran grafis pada kata "datang"



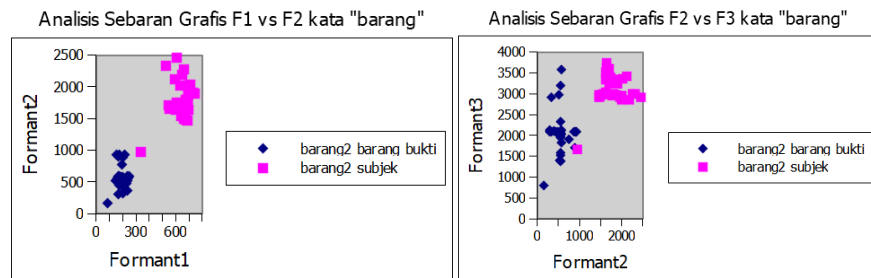
Gambar Lampiran 3.16 Analisis sebaran grafis pada kata "ke"



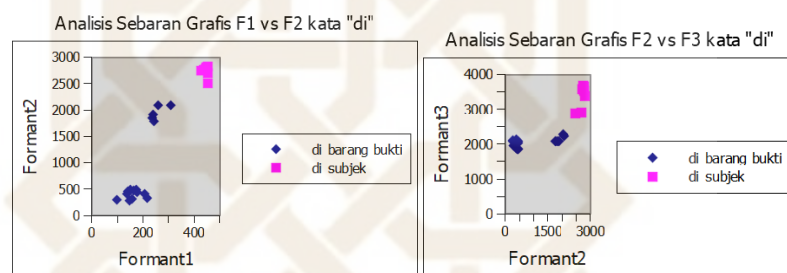
Gambar Lampiran 3.17 Analisis sebaran grafis pada kata "rumah"



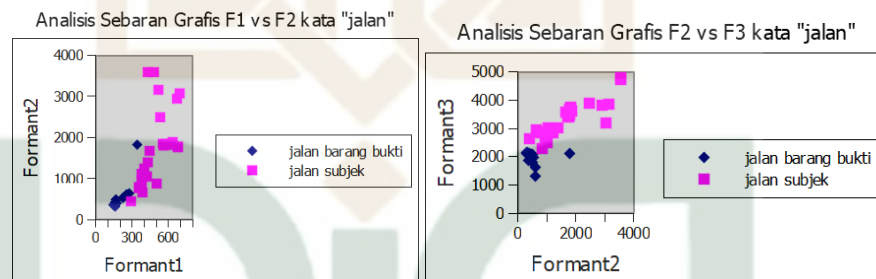
Gambar Lampiran 3.18 Analisis sebaran grafis pada kata "ambil"



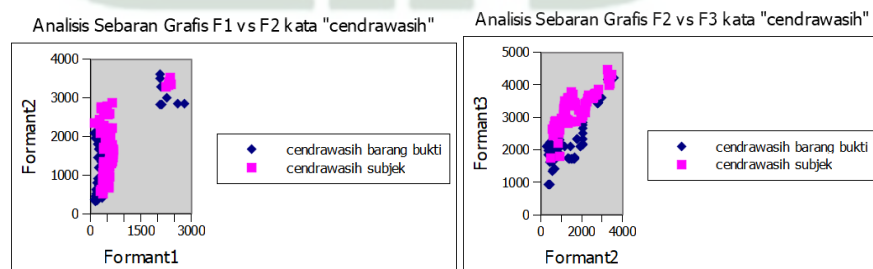
Gambar Lampiran 3.19 Analisis sebaran grafis pada kata "barang"



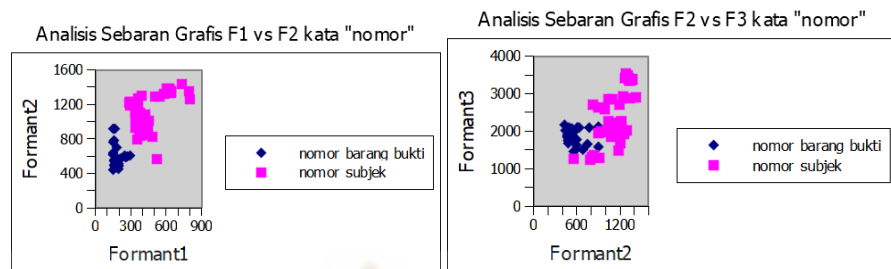
Gambar Lampiran 3.20 Analisis sebaran grafis pada kata "di"



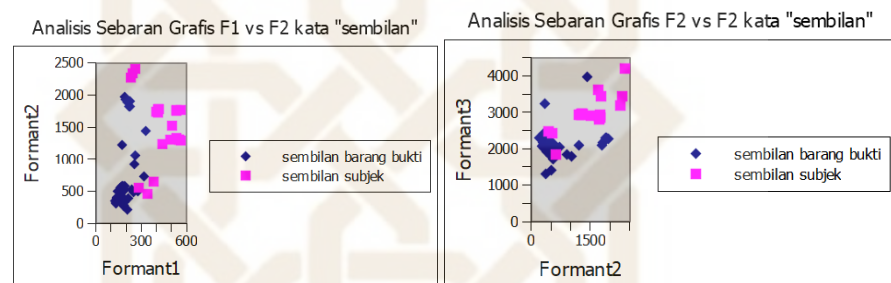
Gambar Lampiran 3.21 Analisis sebaran grafis pada kata "jalan"



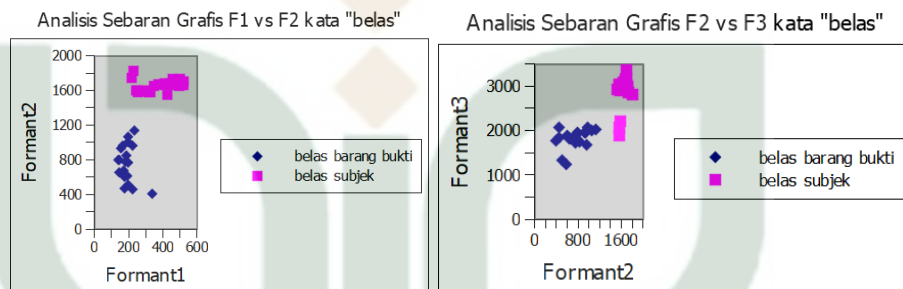
Gambar Lampiran 3.22 Analisis sebaran grafis pada kata "cendrawasih"



Gambar Lampiran 3.23 Analisis sebaran grafis pada kata “nomor”



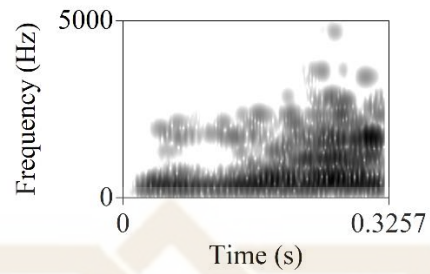
Gambar Lampiran 3.24 Analisis sebaran grafis pada kata “sembilan”



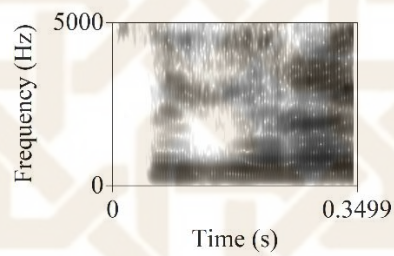
Gambar Lampiran 3.25 Analisis sebaran grafis pada kata “belas”

Berdasarkan sebaran grafis pada keseluruhan Gambar ada beberapa nilai *formant* 1, 2, dan 3 dari beberapa kata yang tidak dalam rentang kelompok yang sama yaitu kata “barang2”, “ke2”, “di” dan “belas” dinyatakan TIDAK IDENTIK akan tetapi dari keseluruhan sebaran grafis pada nilai *formant* 1, 2 dan 3 kata-kata lainnya IDENTIK.

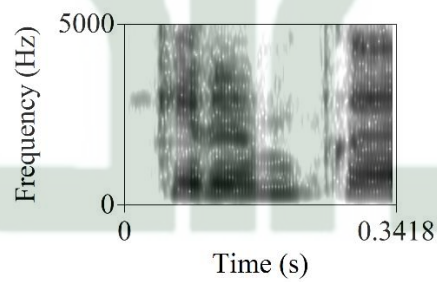
4. Analisis Spektrogram



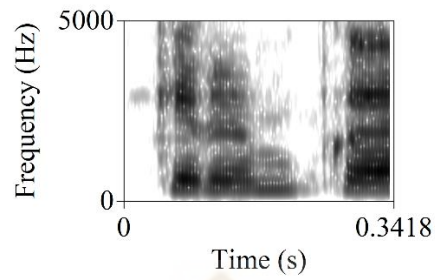
Gambar Lampiran 4.1 Spektrogram dari kata "segera" dari rekaman suara barang bukti



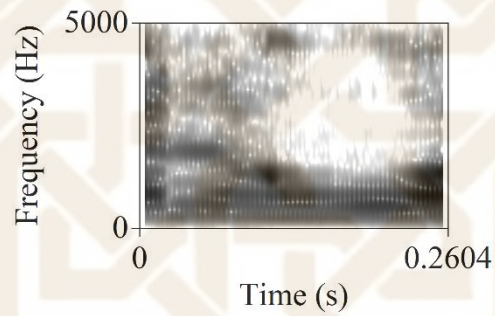
Gambar Lampiran 4.2 Spektrogram dari kata "segera" dari rekaman suara pembandingan



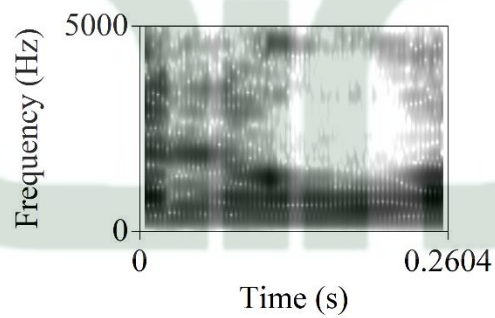
Gambar Lampiran 4.3 Spektrogram dari kata "kirimkan" rekaman suara barang bukti



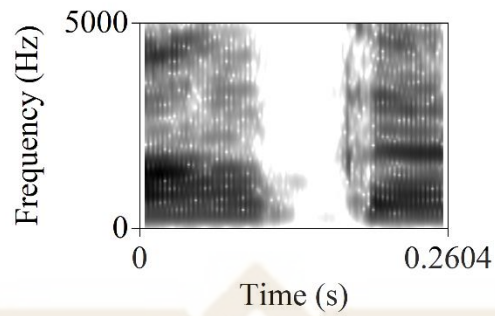
Gambar Lampiran 4.4 Spektogram dari kata “kirimkan” dari rekaman suara pembanding



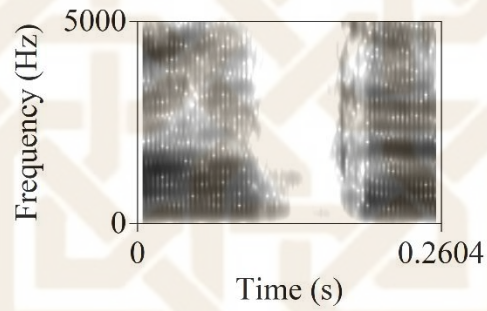
Gambar Lampiran 4.5 Spektogram dari kata “uang” rekaman suara barang bukti



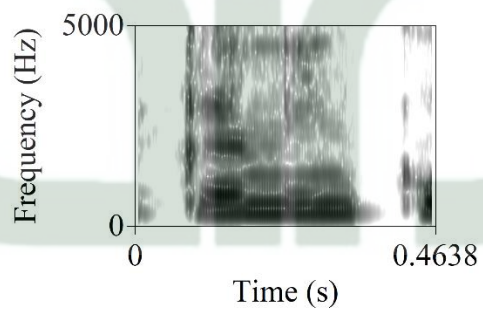
Gambar Lampiran 4.6 Spektogram dari kata “uang” dari rekaman suara pembanding



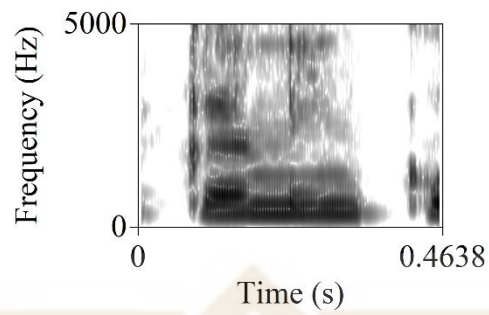
Gambar Lampiran 4.7 Spektogram dari kata “ke” rekaman suara barang bukti



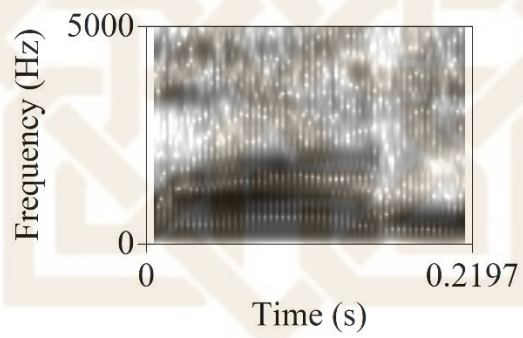
Gambar Lampiran 4.8 Spektogram dari kata “ke” dari rekaman suara pembanding



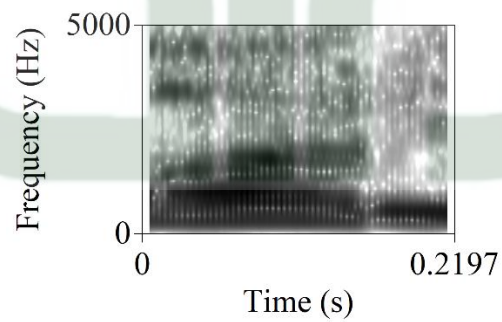
Gambar Lampiran 4 9 Spektogram dari kata “rekeningku” rekaman suara barang bukti



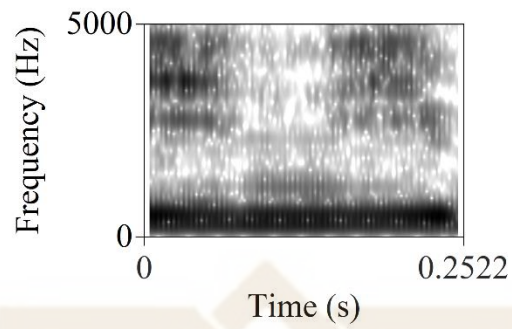
Gambar Lampiran 4.10 Spektogram dari kata “rekeningku” dari rekaman suara pembanding



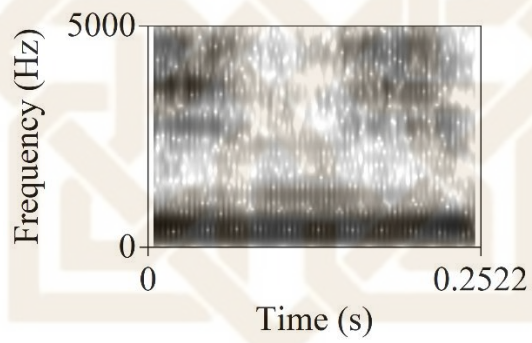
Gambar Lampiran 4.11 Spektogram dari kata “hari” rekaman suara barang bukti



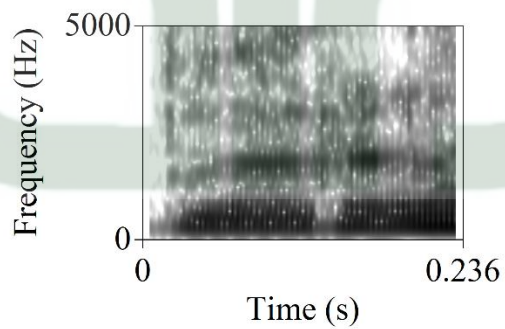
Gambar Lampiran 4.12 Spektogram dari kata “hari” rekaman suara pembanding



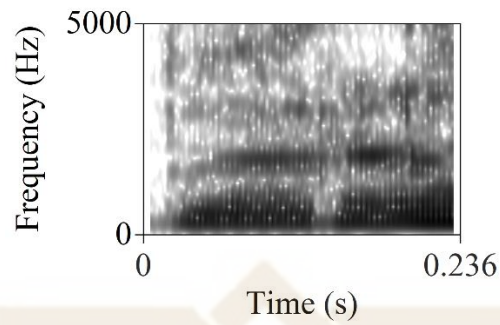
Gambar Lampiran 4.13 Spektogram dari kata “ini” rekaman suara barang bukti



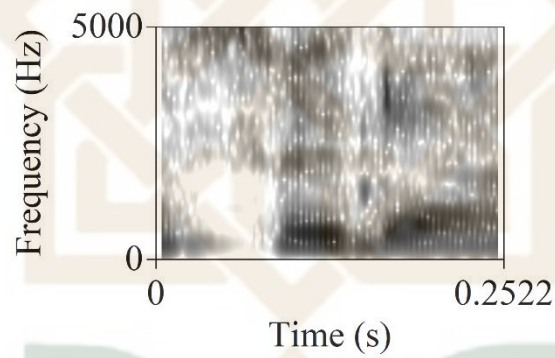
Gambar Lampiran 4.14 Spektogram dari kata “ini” rekaman suara pembandingan



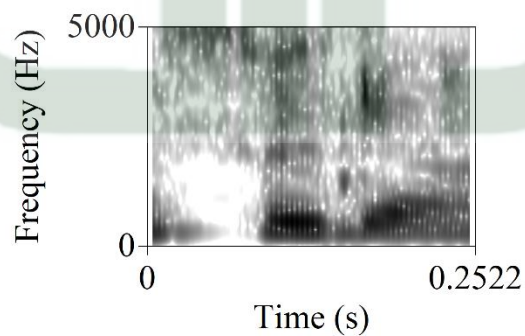
Gambar Lampiran 4.15 Spektogram dari kata “barang” rekaman suara barang bukti



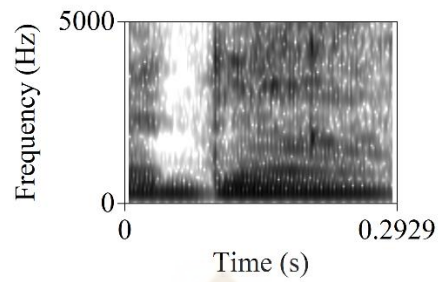
Gambar Lampiran 4.16 Spektogram dari kata “barang” rekaman suara pembanding



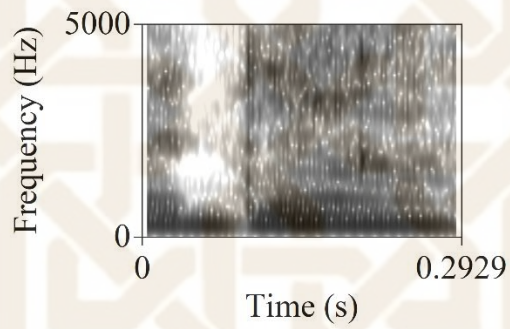
Gambar Lampiran 4.17 Spektogram dari kata “sudah” rekaman suara barang bukti



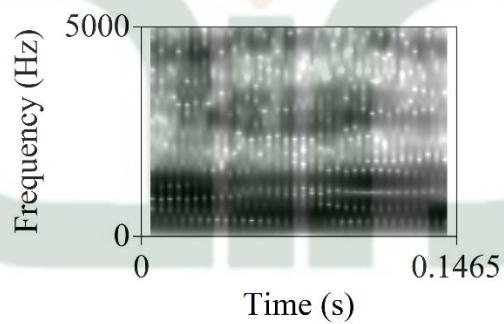
Gambar Lampiran 4.18 Spektogram dari kata “sudah” rekaman suara pembanding



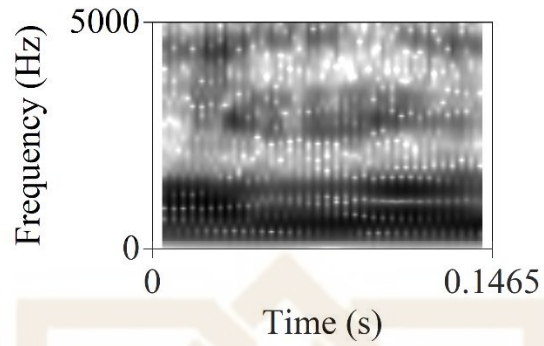
Gambar Lampiran 4.19 Spektogram dari kata “ada” rekaman suara barang bukti



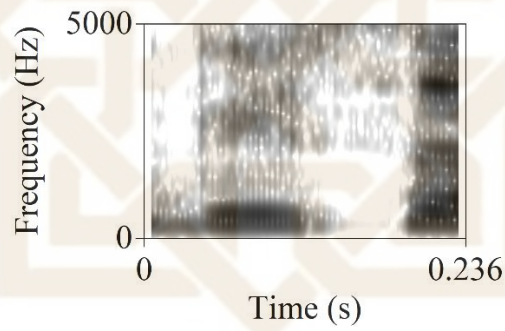
Gambar Lampiran 4.20 Spektogram dari kata “ada” rekaman suara pembanding



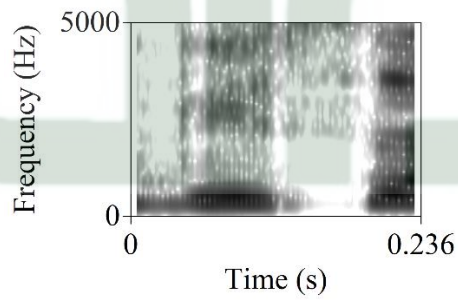
Gambar Lampiran 4.21 Spektogram dari kata “kalau” rekaman suara barang bukti



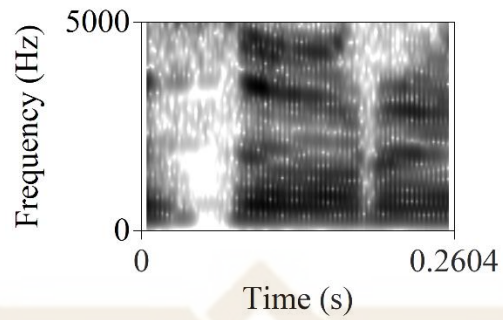
Gambar Lampiran 4.22 Spektogram dari kata “kalau” rekaman suara pembanding



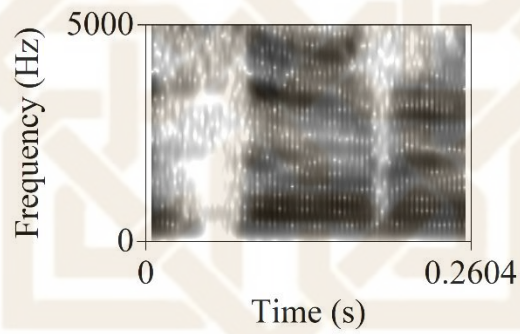
Gambar Lampiran 4.23 Spektogram dari kata “bisa” rekaman suara barang bukti



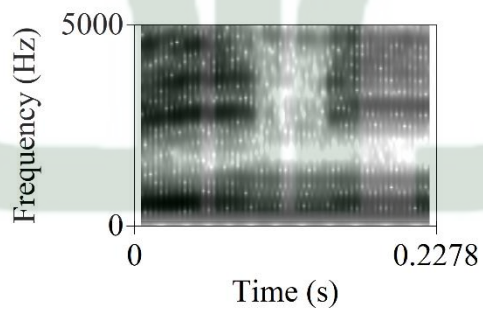
Gambar Lampiran 4.24 Spektogram dari kata “bisa” rekaman suara pembanding



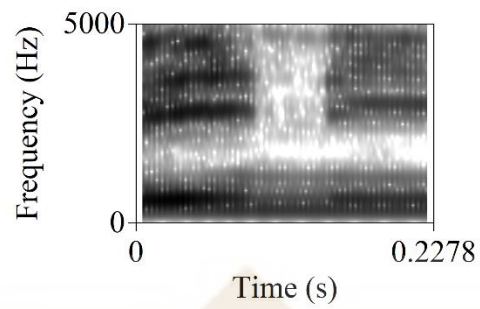
Gambar Lampiran 4.25 Spektogram dari kata “sore” rekaman suara barang bukti



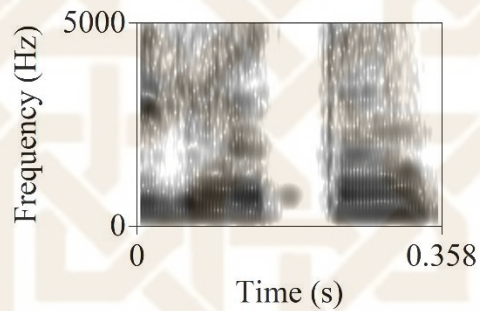
Gambar Lampiran 4.26 Spektogram dari kata “sore” rekaman suara pembeding



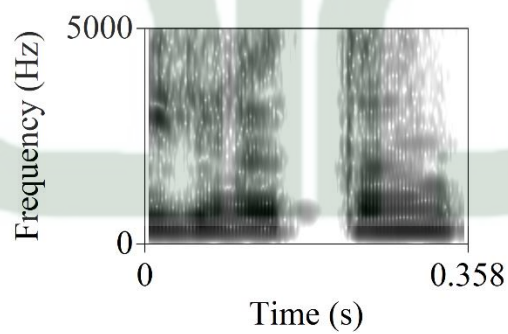
Gambar Lampiran 4.27 Spektogram dari kata “ini” rekaman suara barang bukti



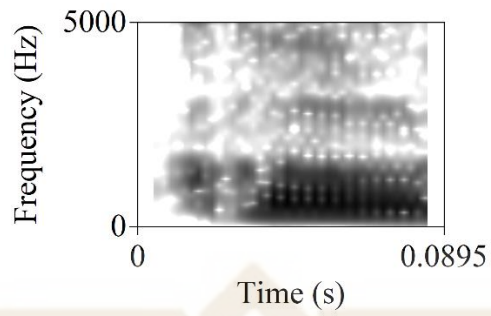
Gambar Lampiran 4.28 Spektogram dari kata “ini” rekaman suara pembeding



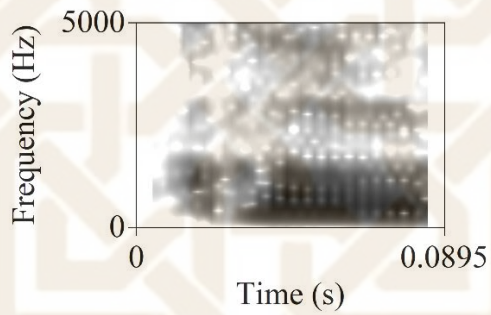
Gambar Lampiran 4.29 Spektogram dari kata “datang” rekaman suara barang bukti



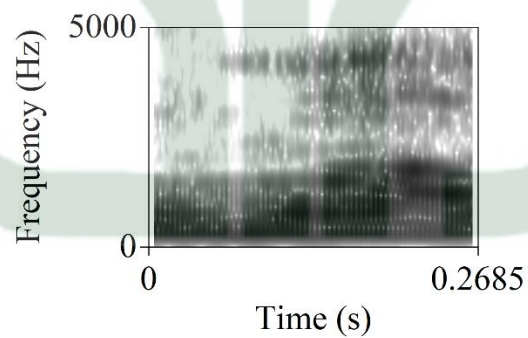
Gambar Lampiran 4.30 Spektogram dari kata “datang” rekaman suara pembeding



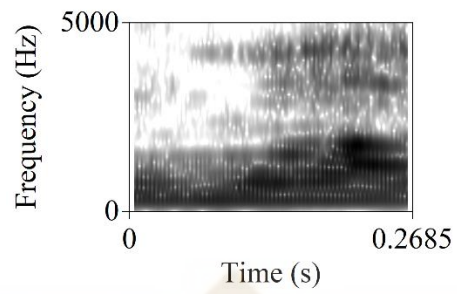
Gambar Lampiran 4.31 Spektogram dari kata “ke” rekaman suara barang bukti



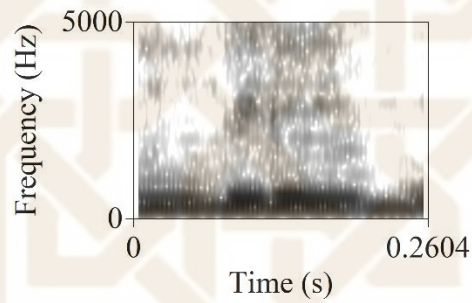
Gambar Lampiran 4.32 Spektogram dari kata “ke” rekaman suara pembanding



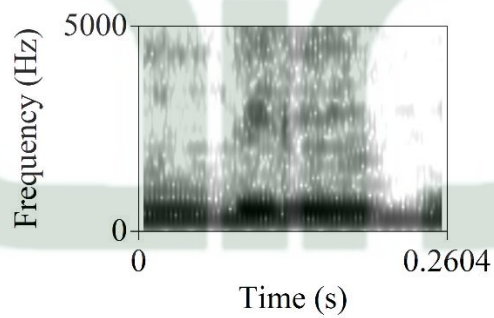
Gambar Lampiran 4.33 Spektogram dari kata “rumah” rekaman suara barang bukti



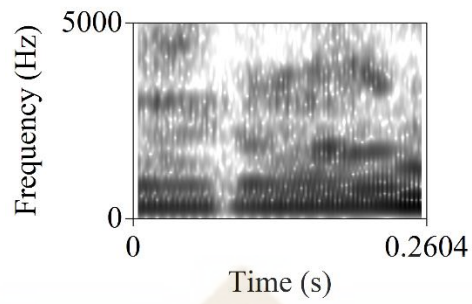
Gambar Lampiran 4.34 Spektogram dari kata “rumah” rekaman suara pembeding



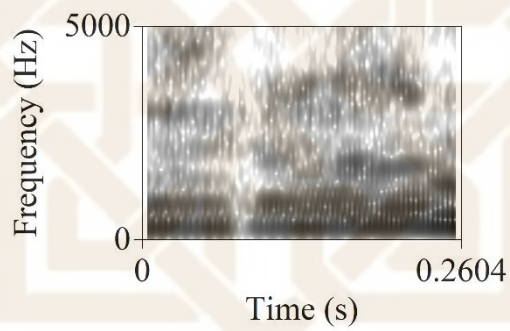
Gambar Lampiran 4.35 Spektogram dari kata “ambil” rekaman suara barang bukti



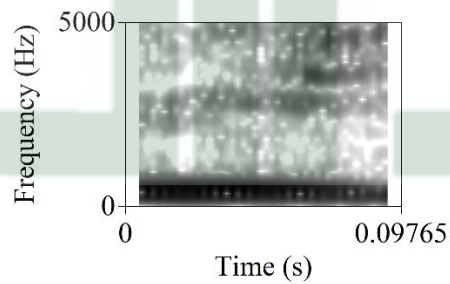
Gambar Lampiran 4.36 Spektogram dari kata “ambil” rekaman suara pembeding



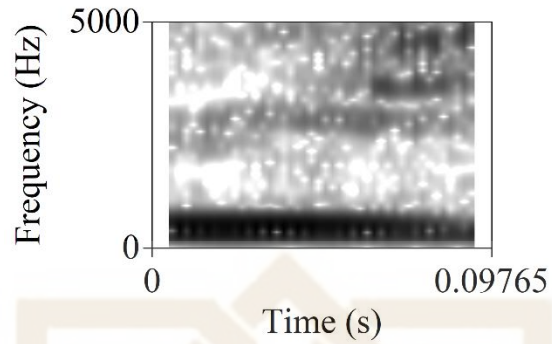
Gambar Lampiran 4.37 Spektogram dari kata “barang” rekaman suara barang bukti



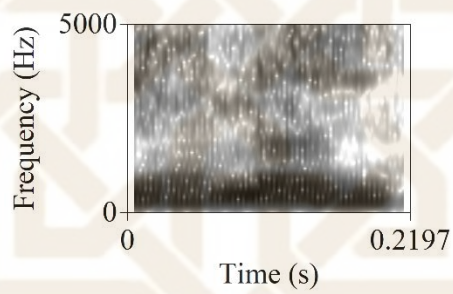
Gambar Lampiran 4.38 Spektogram dari kata “barang” rekaman suara pembanding



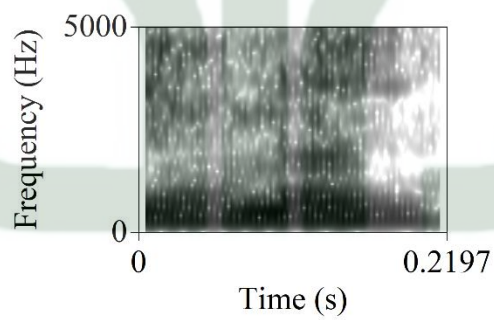
Gambar Lampiran 4.39 Spektogram dari kata “di” rekaman suara barang bukti



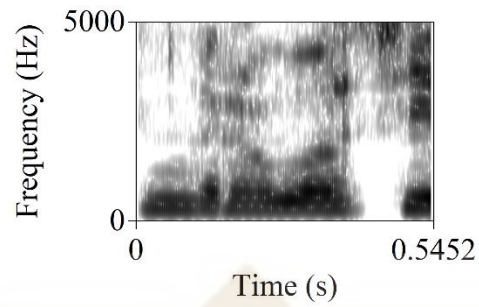
Gambar Lampiran 4.40 Spektogram dari kata "di" rekaman suara pembanding



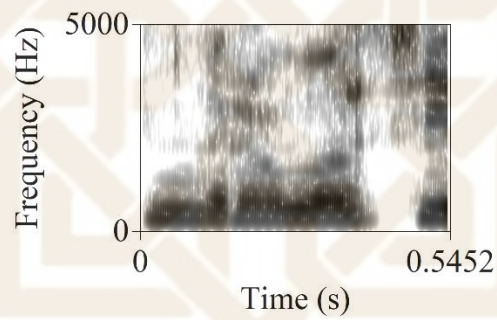
Gambar Lampiran 4.41 Spektogram dari kata "jalan" rekaman suara barang bukti



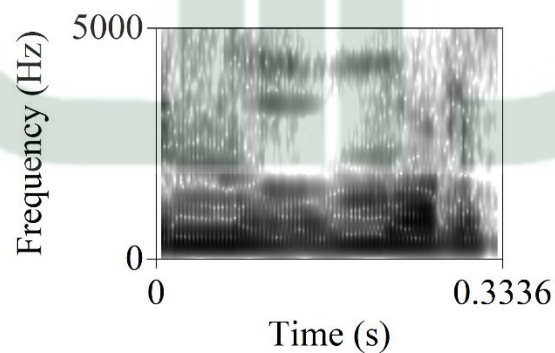
Gambar Lampiran 4.42 Spektogram dari kata "jalan" rekaman suara pembanding



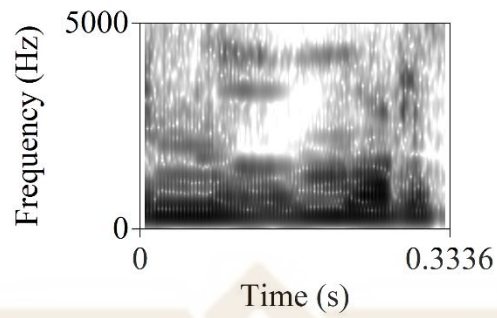
Gambar Lampiran 4.43 Spektogram dari kata “cendrawasih” rekaman suara barang bukti



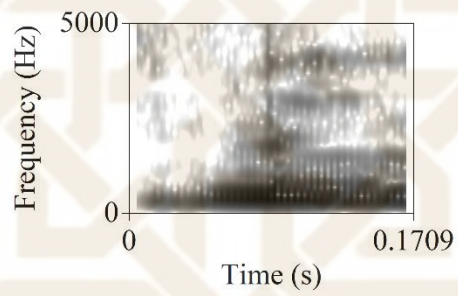
Gambar Lampiran 4.44 Spektogram dari kata “cendrawasih” rekaman suara pembanding



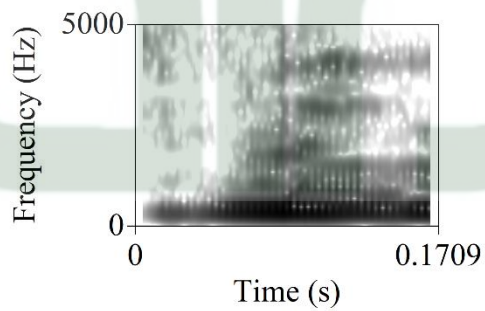
Gambar Lampiran 4.45 Spektogram dari kata “nomor” rekaman suara barang bukti



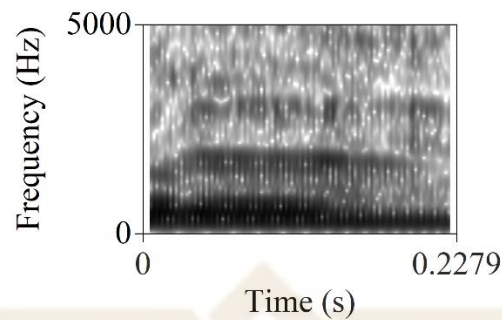
Gambar Lampiran 4.46 Spektogram dari kata “nomor” rekaman suara pembeding



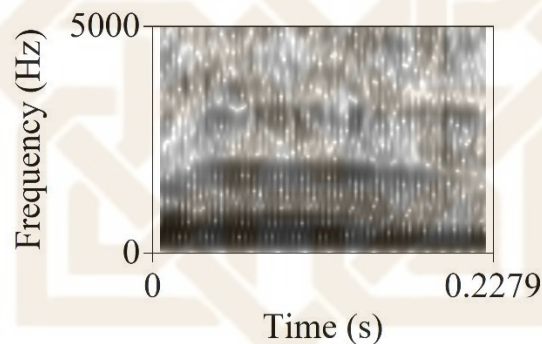
Gambar Lampiran 4.47 Spektogram dari kata “sembilan” rekaman suara barang bukti



Gambar Lampiran 4.48 Spektogram dari kata “sembilan” rekaman suara pembeding



Gambar Lampiran 4.49 Spektogram dari kata “belas” rekaman suara barang bukti



Gambar Lampiran 4.50 Spektogram dari kata “belas” rekaman suara pembanding
Berdasarkan dari Gambar spektogram di atas secara keseluruhan dari kata-kata yang ada antara rekaman suara barang bukti dan rekaman suara pembanding adalah IDENTIK kecuali pada kata “segera” yaitu TIDAK IDENTIK.

5. Kasus dengan Suara orang yang berbeda

a. Analisis *Pitch* Rekaman Suara B dan Rekaman Suara C

Tabel Lampiran 5.1 Analisis *Pitch* kata “hari”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘hari’		

<i>Pitch minimum</i>	236.56567958265228 Hz	214.19062910485005 Hz
<i>Pitch maksimum</i>	255.28992031538968 Hz	279.6180610663307 Hz
<i>Pitch quantile</i>	247.5199556121539 Hz	232.81716982097336 Hz
<i>Pitch mean</i>	247.3776824053327 Hz	235.88600319370002 Hz
<i>Pitch standar deviasi</i>	5.139091459245823 Hz	14.36336475667572 Hz

Tabel Lampiran 5.2 Analisis *Pitch* kata “ini”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘ini’		
<i>Pitch minimum</i>	224.3228138850289 Hz	212.90379551958333 Hz
<i>Pitch maksimum</i>	230.49922048931896 Hz	286.174066072338 Hz
<i>Pitch quantile</i>	227.79103939800598 Hz	222.10418214415913 Hz
<i>Pitch mean</i>	227.84398545927715 Hz	235.62591947993695 Hz
<i>Pitch standar deviasi</i>	1.401784846725614 Hz	24.455012941560504 Hz

Tabel Lampiran 5.3 Analisis *Pitch* kata “barang”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘barang’		
<i>Pitch minimum</i>	204.42425494935893 Hz	217.40675541303315 Hz
<i>Pitch maksimum</i>	247.8346599011783 Hz	271.56762030542774 Hz
<i>Pitch quantile</i>	222.77069939508937 Hz	242.66209748130137 Hz
<i>Pitch mean</i>	226.69256682652411 Hz	245.2601510240927 Hz
<i>Pitch standar deviasi</i>	10.598508977332978 Hz	15.115757013599723 Hz

Tabel Lampiran 5.4 Analisis *Pitch* kata “sudah”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘sudah’		
<i>Pitch minimum</i>	211.50091086196508 Hz	219.51312974108524 Hz
<i>Pitch maksimum</i>	267.29242949604816 Hz	270.9120630123591 Hz
<i>Pitch quantile</i>	238.12436863279473 Hz	229.69074163763779 Hz
<i>Pitch mean</i>	240.0656303508215 Hz	239.2975952959453 Hz
<i>Pitch standar deviasi</i>	15.566326079907512 Hz	18.431379604841446 Hz

Tabel Lampiran 5.5 Analisis *Pitch* kata “ada”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘ada’		
<i>Pitch minimum</i>	179.72496814864434 Hz	103.91773726179116 Hz
<i>Pitch maksimum</i>	222.1117775083332 Hz	222.75026306020996 Hz
<i>Pitch quantile</i>	207.74048632177957 Hz	203.27699040287368 Hz
<i>Pitch mean</i>	205.64939568605422 Hz	186.5767865972318 Hz
<i>Pitch standar deviasi</i>	10.18232102015718 Hz	42.7139552378518 Hz

Tabel Lampiran 5.6 Analisis *Pitch* kata “kalau”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘kalau’		
<i>Pitch minimum</i>	252.77782236656586 Hz	231.5655783414139 Hz
<i>Pitch maksimum</i>	261.6391542294983 Hz	250.54247568444904 Hz
<i>Pitch quantile</i>	255.75964116515104 Hz	239.2725478745785 Hz
<i>Pitch mean</i>	256.2573167102688 Hz	239.9081184930738 Hz

<i>Pitch</i> standar deviasi	2.9068417217348945 Hz	3.943992383642183 Hz
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Tabel Lampiran 5.7 Analisis Pitch kata “bisa”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘bisa’		
<i>Pitch minimum</i>	217.85672356930488 Hz	213.8867589155768 Hz
<i>Pitch maksimum</i>	305.83502730991034 Hz	275.0277175006839 Hz
<i>Pitch quantile</i>	250.83786520730675 Hz	242.2647562334833 Hz
<i>Pitch mean</i>	254.6850108190209 Hz	241.06194716024626 Hz
<i>Pitch</i> standar deviasi	25.708766348565934 Hz	19.42216875060492 Hz

Tabel Lampiran 5.8 Analisis Pitch kata “sore”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘sore’		
<i>Pitch minimum</i>	252.9021381956569 Hz	241.54575893353964 Hz
<i>Pitch maksimum</i>	295.71239194256333 Hz	300.62931620114995 Hz
<i>Pitch quantile</i>	269.2349426115964 Hz	253.24647113438488 Hz
<i>Pitch mean</i>	269.2349426115964 Hz	258.62798698713306 Hz
<i>Pitch</i> standar deviasi	13.268034764986517 Hz	15.650501555045595 Hz

Tabel Lampiran 5 9 Analisis Pitch kata “ini”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘ini’		

<i>Pitch minimum</i>	270.8827051129631 Hz	222.66815823108251 Hz
<i>Pitch maksimum</i>	283.0138960004019 Hz	260.17880580899714 Hz
<i>Pitch quantile</i>	275.4020583305571 Hz	234.48959070260938 Hz
<i>Pitch mean</i>	275.9442018008169 Hz	236.40294944954346 Hz
<i>Pitch standar deviasi</i>	3.7998415159153605 Hz	9.646221002879406 Hz

Tabel Lampiran 5.10 Analisis Pitch kata “datang”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘datang’		
<i>Pitch minimum</i>	191.06679201697813 Hz	219.59293376322748 Hz
<i>Pitch maksimum</i>	256.781754460099 Hz	271.777935383536 Hz
<i>Pitch quantile</i>	249.7866001318657 Hz	242.33720858580227 Hz
<i>Pitch mean</i>	43.86930398631534 Hz	241.94513133687946 Hz
<i>Pitch standar deviasi</i>	14.431438103129343 Hz	15.21199273752858 Hz

Tabel Lampiran 5.11 Analisis Pitch kata “ke”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘ke’		
<i>Pitch minimum</i>	241.33169159286376 Hz	246.630159907641 Hz
<i>Pitch maksimum</i>	266.83730312370085 Hz	257.8420003099242 Hz
<i>Pitch quantile</i>	250.55941403142356 Hz	252.52798296729898 Hz
<i>Pitch mean</i>	252.24656570890994 Hz	252.4510084945357 Hz
<i>Pitch standar deviasi</i>	10.428269121775005 Hz	3.704515774204008 Hz

Tabel Lampiran 5.12 Analisis Pitch kata “rumah”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘rumah’		
<i>Pitch minimum</i>	230.28790950690117 Hz	216.0474290331775 Hz
<i>Pitch maksimum</i>	250.2839220951919 Hz	293.4192357875355 Hz
<i>Pitch quantile</i>	241.709785688127 Hz	233.9350014702524 Hz
<i>Pitch mean</i>	240.8667877568292 Hz	244.15428056188435 Hz
<i>Pitch standar deviasi</i>	6.584376761829985 Hz	24.144226083935965 Hz

Tabel Lampiran 5.13 Analisis Pitch kata “ambil”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘ambil’		
<i>Pitch minimum</i>	196.1331089448004 Hz	221.12821821647788 Hz
<i>Pitch maksimum</i>	230.94191871666234 Hz	268.4062742383241 Hz
<i>Pitch quantile</i>	223.76484954705333 Hz	232.34526072728667 Hz
<i>Pitch mean</i>	219.46876007865984 Hz	234.62301017885454 Hz
<i>Pitch standar deviasi</i>	10.871863850283566 Hz	9.979764897872421 Hz

Tabel Lampiran 5.14 Analisis Pitch kata “barang”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘barang’		
<i>Pitch minimum</i>	187.40613420246157 Hz	210.95163005178563 Hz
<i>Pitch maksimum</i>	248.85536674868266 Hz	286.02755178616206 Hz
<i>Pitch quantile</i>	211.07312558557504 Hz	229.39582592759993 Hz
<i>Pitch mean</i>	215.00133142136573 Hz	234.2424697068465 Hz

<i>Pitch</i> standar deviasi	17.53411629414866 Hz	21.484011539473485 Hz
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Tabel Lampiran 5.15 Analisis Pitch kata “di”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘di’		
<i>Pitch minimum</i>	216.56608521474985 Hz	209.0414820809071 Hz
<i>Pitch maksimum</i>	235.58531699233876 Hz	259.14591690236296 Hz
<i>Pitch quantile</i>	229.4389137531275 Hz	225.6172833978702 Hz
<i>Pitch mean</i>	227.91583698128636 Hz	226.32802735923497 Hz
<i>Pitch</i> standar deviasi	7.119532632090456 Hz	12.380729973959028 Hz

Tabel Lampiran 5.16 Analisis Pitch kata “jalan”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘jalan’		
<i>Pitch minimum</i>	214.7706692863239 Hz	213.61075721519396 Hz
<i>Pitch maksimum</i>	234.96904566545777 Hz	251.39909426001 Hz
<i>Pitch quantile</i>	226.06102368553547 Hz	228.04096613072366 Hz
<i>Pitch mean</i>	224.45709782023306 Hz	230.72364442574957 Hz
<i>Pitch</i> standar deviasi	6.7418262674074745 Hz	11.702419866743528 Hz

Tabel Lampiran 5.17 Analisis Pitch kata “cendrawasih”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘cendrawasih’		

<i>Pitch minimum</i>	204.9397323578413 Hz	205.46210211619402 Hz
<i>Pitch maksimum</i>	270.6920540613742 Hz	274.6950940792408 Hz
<i>Pitch quantile</i>	232.64206205354208 Hz	222.81490164481124 Hz
<i>Pitch mean</i>	233.36721655394183 Hz	223.42226909063632 Hz
<i>Pitch standar deviasi</i>	15.037229877617696 Hz	14.978843918267378 Hz

Tabel Lampiran 5.18 Analisis Pitch kata “nomor”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘nomor’		
<i>Pitch minimum</i>	237.83234562081458 Hz	222.60756431021727 Hz
<i>Pitch maksimum</i>	259.2735572677306 Hz	273.7849154782894 Hz
<i>Pitch quantile</i>	249.78637005630287 Hz	233.92541868619492 Hz
<i>Pitch mean</i>	248.40951042834706 Hz	241.51624326161547 Hz
<i>Pitch standar deviasi</i>	6.786545471021529 Hz	16.486997179243993 Hz

Tabel Lampiran 5.19 Analisis Pitch kata “sembilan”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘sembilan’		
<i>Pitch minimum</i>	216.69910345638826 Hz	219.80542648453314 Hz
<i>Pitch maksimum</i>	251.21026752134074 Hz	285.8210125626415 Hz
<i>Pitch quantile</i>	239.93628713785608 Hz	229.513613687852 Hz
<i>Pitch mean</i>	238.24571563686695 Hz	231.3028965899165 Hz
<i>Pitch standar deviasi</i>	10.393958695384537 Hz	12.231763809494757 Hz

Tabel Lampiran 5.20 Analisis Pitch kata “belas”

Analisis Statistik	Rekaman Suara B	Rekaman Suara C
Kata ‘belas’		
<i>Pitch minimum</i>	199.7700381654487 Hz	184.5370199462008 Hz
<i>Pitch maksimum</i>	227.01080787547 Hz	310.5356867635569 Hz
<i>Pitch quantile</i>	220.20563583484974 Hz	208.3538190931106 Hz
<i>Pitch mean</i>	16.53843735847357 Hz	222.93112141681647 Hz
<i>Pitch standar deviasi</i>	8.780745125355766 Hz	36.85339070731674 Hz

b. Analisis statistik Anova Rekaman Suara B dan Rekaman Suara C

Tabel Lampiran 5.21 Anova kata “hari”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.78304	0.3796	3.9985	<i>Rejected</i>
<i>Formant 2</i>	35.2878	1.47194	3.9985	<i>Rejected</i>
<i>Formant 3</i>	9.90812	0.00254	3.9985	<i>Rejected</i>
<i>Formant 4</i>	21.4055	1.9872	3.9985	<i>Rejected</i>
<i>Formant 5</i>	0	1	5.3176	<i>Accepted</i>
<i>Bandwith 1</i>	21.7431	1.745168	3.9985	<i>Rejected</i>
<i>Bandwith 2</i>	1.341025	0.25136	3.9985	<i>Rejected</i>
<i>Bandwith 3</i>	0.15386	0.69624	3.9985	<i>Accepted</i>
<i>Bandwith 4</i>	1.91495	0.171457	3.9985	<i>Accepted</i>
<i>Bandwith 5</i>	0	1	5.3176	<i>Accepted</i>

Tabel Lampiran 5.22 Anova kata “ini”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	1.4304	0.2347	3.9423	<i>Accepted</i>
<i>Formant 2</i>	4.60509	0.034453	3.9423	<i>Rejected</i>
<i>Formant 3</i>	12.7165	0.00057	3.9423	<i>Rejected</i>
<i>Formant 4</i>	10.3906	0.0017	3.9423	<i>Rejected</i>
<i>Formant 5</i>	1.5106	0.23005	4.2252	<i>Rejected</i>
<i>Bandwith 1</i>	0.13189	0.7173	3.9423	<i>Accepted</i>
<i>Bandwith 2</i>	0.1833	0.6695	3.9423	<i>Accepted</i>
<i>Bandwith 3</i>	14.8962	0.0002	3.9423	<i>Rejected</i>

<i>Bandwith 4</i>	1.10581	0.29569	3.9423	<i>Rejected</i>
<i>Bandwith 5</i>	0.44542	0.5104	4.2252	<i>Accepted</i>

Tabel Lampiran 5.23 Anova kata “barang”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	17.9574	5.65290	3.9519	<i>Rejected</i>
<i>Formant 2</i>	1.8272	0.180003	3.9519	<i>Accepted</i>
<i>Formant 3</i>	4.3774	0.0393	3.9519	<i>Rejected</i>
<i>Formant 4</i>	4.36378	0.0396	3.9519	<i>Rejected</i>
<i>Formant 5</i>	7.1512	0.01143	4.13001	<i>Rejected</i>
<i>Bandwith 1</i>	0.27944	0.5984	3.9519	<i>Accepted</i>
<i>Bandwith 2</i>	22.14406	9.58688	3.9519	<i>Rejected</i>
<i>Bandwith 3</i>	0.5377	0.4653	3.9519	<i>Rejected</i>
<i>Bandwith 4</i>	0.22877	0.6336	3.9519	<i>Accepted</i>
<i>Bandwith 5</i>	0.13075	0.7199	4.13001	<i>Accepted</i>

Tabel Lampiran 5 .24 Anova kata “sudah”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.2154	0.6443	4.0098	<i>Accepted</i>
<i>Formant 2</i>	5.9661	0.0177	4.0098	<i>Rejected</i>
<i>Formant 3</i>	0.44814	0.50592	4.0098	<i>Accepted</i>
<i>Formant 4</i>	0.0642	0.8008	4.0098	<i>Accepted</i>
<i>Formant 5</i>	0	1	4.6672	<i>Accepted</i>
<i>Bandwith 1</i>	7.19995	0.0095	4.0098	<i>Rejected</i>
<i>Bandwith 2</i>	19.4947	4.55497	4.0098	<i>Rejected</i>
<i>Bandwith 3</i>	12.0468	0.000996	4.0098	<i>Rejected</i>
<i>Bandwith 4</i>	4.3425	0.04166	4.0098	<i>Rejected</i>
<i>Bandwith 5</i>	0	1	4.6672	<i>Accepted</i>

Tabel Lampiran 5.25 Anova kata “ada”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	62.3946	5.83716	3.9445	<i>Rejected</i>
<i>Formant 2</i>	1.9019	0.1712	3.9445	<i>Accepted</i>
<i>Formant 3</i>	4.0086	0.0482	3.9445	<i>Rejected</i>
<i>Formant 4</i>	2.01246	0.1594	3.9445	<i>Accepted</i>
<i>Formant 5</i>	1.01484	0.37956	3.4668	<i>Rejected</i>

<i>Bandwith 1</i>	2.4597	0.1202	3.9445	<i>Rejected</i>
<i>Bandwith 2</i>	5.18333	0.0251	3.9445	<i>Rejected</i>
<i>Bandwith 3</i>	21.926	9.74162	3.9445	<i>Rejected</i>
<i>Bandwith 4</i>	20.998	1.44192	3.9445	<i>Rejected</i>
<i>Bandwith 5</i>	2.4314	0.1332	4.3009	<i>Rejected</i>

Tabel Lampiran 5.26 Anova kata “kalau”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.66399	0.4196	4.06704	<i>Rejected</i>
<i>Formant 2</i>	62.0245	7.11868	4.06704	<i>Rejected</i>
<i>Formant 3</i>	4.33113	0.04341	4.06704	<i>Rejected</i>
<i>Formant 4</i>	1.14076	0.29145	4.06704	<i>Rejected</i>
<i>Formant 5</i>	78.00004	1.21028	4.10545	<i>Rejected</i>
<i>Bandwith 1</i>	8.72437	0.00507	4.06704	<i>Rejected</i>
<i>Bandwith 2</i>	22.7202	2.16596	4.06704	<i>Rejected</i>
<i>Bandwith 3</i>	3.91582	0.0542	4.06704	<i>Rejected</i>
<i>Bandwith 4</i>	1.36704	0.24876	4.06704	<i>Rejected</i>
<i>Bandwith 5</i>	4.38755	0.0431	4.10545	<i>Rejected</i>

Tabel Lampiran 5.27 Anova kata “bisa”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	4.47545	0.03775	3.97023	<i>Rejected</i>
<i>Formant 2</i>	0.26512	0.60815	3.97023	<i>Accepted</i>
<i>Formant 3</i>	0.25473	0.61526	3.97023	<i>Accepted</i>
<i>Formant 4</i>	0.04766	0.82777	3.97023	<i>Accepted</i>
<i>Formant 5</i>	1.95764	0.189326	4.84433	<i>Rejected</i>
<i>Bandwith 1</i>	3.65151	0.0599	3.97023	<i>Rejected</i>
<i>Bandwith 2</i>	0.86593	0.3551	3.97023	<i>Rejected</i>
<i>Bandwith 3</i>	2.17514	0.1445	3.97023	<i>Rejected</i>
<i>Bandwith 4</i>	0.24748	0.62032	3.97023	<i>Accepted</i>
<i>Bandwith 5</i>	0.05307	0.822026	4.84433	<i>Accepted</i>

Tabel Lampiran 5.28 Anova kata “sore”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	3.97023	0.00513	3.9909	<i>Rejected</i>
<i>Formant 2</i>	1.24822	0.26806	3.9909	<i>Rejected</i>

<i>Formant 3</i>	4.07254	0.04778	3.9909	<i>Rejected</i>
<i>Formant 4</i>	22.53406	1.20238	3.9909	<i>Rejected</i>
<i>Formant 5</i>	0.00426	0.94844	4.24169	<i>Accepted</i>
<i>Bandwith 1</i>	42.5212	1.279254	3.9909	<i>Rejected</i>
<i>Bandwith 2</i>	9.6812	0.99218	3.9909	<i>Rejected</i>
<i>Bandwith 3</i>	4.90754	0.0303	3.9909	<i>Rejected</i>
<i>Bandwith 4</i>	1.8903	0.17396	3.9909	<i>Rejected</i>
<i>Bandwith 5</i>	2.56475	0.12183	4.24169	<i>Rejected</i>

Tabel Lampiran 5.29 Anova kata “ini”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.7675	0.38411	3.98405	<i>Rejected</i>
<i>Formant 2</i>	67.50602	9.808413	3.98405	<i>Rejected</i>
<i>Formant 3</i>	41.8398	1.33791	3.98405	<i>Rejected</i>
<i>Formant 4</i>	48.37208	1.823208	3.98404	<i>Rejected</i>
<i>Formant 5</i>	6.0095	0.02224	4.27934	<i>Rejected</i>
<i>Bandwith 1</i>	1.44596	0.24266	3.13167	<i>Rejected</i>
<i>Bandwith 2</i>	11.72455	0.001056	3.98405	<i>Rejected</i>
<i>Bandwith 3</i>	3.23701	0.0765	3.98405	<i>Accepted</i>
<i>Bandwith 4</i>	0.45386	0.50282	3.98405	<i>Accepted</i>
<i>Bandwith 5</i>	3.63476	0.06915	4.27934	<i>Accepted</i>

Tabel Lampiran 5.30 Anova kata “datang”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	2.63983	0.10739	3.937117	<i>Rejected</i>
<i>Formant 2</i>	14.6603	0.00022	3.937117	<i>Rejected</i>
<i>Formant 3</i>	2.05584	0.15477	3.937117	<i>Rejected</i>
<i>Formant 4</i>	2.67634	0.105025	3.937117	<i>Rejected</i>
<i>Formant 5</i>	4.16158	0.04967	4.149097	<i>Rejected</i>
<i>Bandwith 1</i>	3.113622	0.0807243	3.937117	<i>Rejected</i>
<i>Bandwith 2</i>	0.828554	0.439655	3.087295	<i>Rejected</i>
<i>Bandwith 3</i>	1.71644	0.193183	3.937117	<i>Rejected</i>
<i>Bandwith 4</i>	6.46727	0.012536	3.937117	<i>Rejected</i>
<i>Bandwith 5</i>	3.91239	0.056596	4.149097	<i>Rejected</i>

Tabel Lampiran 5.31 Anova kata “ke”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.7168666	0.499336	3.44335	<i>Rejected</i>
<i>Formant 2</i>	0.6995578	0.412349	4.32479	<i>Rejected</i>
<i>Formant 3</i>	0.01388	0.907334	4.32479	<i>Accepted</i>
<i>Formant 4</i>	0.174601	0.680296	4.32479	<i>Accepted</i>
<i>Formant 5</i>	0	1	18.5128	<i>Accepted</i>
<i>Bandwith 1</i>	0.67209	0.42153	4.32479	<i>Rejected</i>
<i>Bandwith 2</i>	1.09878	0.306448	4.32479	<i>Rejected</i>
<i>Bandwith 3</i>	4.09231	0.055995	4.32479	<i>Rejected</i>
<i>Bandwith 4</i>	1.786606	0.1956422	4.32479	<i>Rejected</i>
<i>Bandwith 5</i>	0	1	18.51282	<i>Accepted</i>

Tabel Lampiran 5.32 Anova kata “rumah”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	29.0776	5.158723	3.942303	<i>Rejected</i>
<i>Formant 2</i>	4.39396	0.038752	3.942303	<i>Rejected</i>
<i>Formant 3</i>	0.575302	0.4500573	3.942303	<i>Rejected</i>
<i>Formant 4</i>	16.9281	8.38289486	3.943408	<i>Rejected</i>
<i>Formant 5</i>	7.68353	0.0084981	4.091278	<i>Rejected</i>
<i>Bandwith 1</i>	13.6212	0.00037	3.942303	<i>Rejected</i>
<i>Bandwith 2</i>	4.71916	0.032343	3.942303	<i>Rejected</i>
<i>Bandwith 3</i>	5.31857	0.023296	3.942303	<i>Rejected</i>
<i>Bandwith 4</i>	14.6031	0.00024	3.943408	<i>Rejected</i>
<i>Bandwith 5</i>	2.19314	0.14666	4.091278	<i>Rejected</i>

Tabel Lampiran 5.33 Anova kata “ambil”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	21.9282	1.06237	3.95321	<i>Rejected</i>
<i>Formant 2</i>	0.42076	0.5183	3.95321	<i>Accepted</i>
<i>Formant 3</i>	3.69428	0.05795	3.95321	<i>Rejected</i>
<i>Formant 4</i>	16.7289	0.000104	3.96347	<i>Rejected</i>
<i>Formant 5</i>	0.78814	0.38637	4.41387	<i>Rejected</i>
<i>Bandwith 1</i>	2.65208	0.10711	3.9532	<i>Rejected</i>
<i>Bandwith 2</i>	0.872008	0.42177	3.10255	<i>Rejected</i>
<i>Bandwith 3</i>	1.73203	0.19169	3.95321	<i>Rejected</i>
<i>Bandwith 4</i>	0.02936	0.8643	3.96347	<i>Accepted</i>
<i>Bandwith 5</i>	2.74292	0.11501	4.41387	<i>Rejected</i>

Tabel Lampiran 5.34 Anova kata “barang”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	2.98075	0.08738	3.937117	<i>Rejected</i>
<i>Formant 2</i>	18.6761	3.6913	3.937117	<i>Rejected</i>
<i>Formant 3</i>	30.9987	2.21551	3.937117	<i>Rejected</i>
<i>Formant 4</i>	9.73001	0.0023	3.937117	<i>Rejected</i>
<i>Formant 5</i>	2.39007	0.13194	4.149097	<i>Rejected</i>
<i>Bandwith 1</i>	0.0038	0.95102	3.937117	<i>Accepted</i>
<i>Bandwith 2</i>	15.8518	0.00013	3.937117	<i>Rejected</i>
<i>Bandwith 3</i>	1.3766	0.25717	3.0873	<i>Rejected</i>
<i>Bandwith 4</i>	3.95811	0.049404	3.937117	<i>Rejected</i>
<i>Bandwith 5</i>	1.43798	0.23927	4.149097	<i>Rejected</i>

Tabel Lampiran 5.35 Anova kata “di”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	5.50733	0.0253	4.1491	<i>Rejected</i>
<i>Formant 2</i>	4.10552	0.0511	4.149097	<i>Rejected</i>
<i>Formant 3</i>	2.87764	0.0995	4.149097	<i>Rejected</i>
<i>Formant 4</i>	1.85178	0.18308	4.149097	<i>Rejected</i>
<i>Formant 5</i>	0	1	6.60789	<i>Accepted</i>
<i>Bandwith 1</i>	1.41531	0.24292	4.149097	<i>Rejected</i>
<i>Bandwith 2</i>	0.00029	0.98652	4.149097	<i>Accepted</i>
<i>Bandwith 3</i>	0.6614	0.42207	4.149097	<i>Rejected</i>
<i>Bandwith 4</i>	0.27141	0.60597	4.149097	<i>Accepted</i>
<i>Bandwith 5</i>	0	1	6.60789	<i>Accepted</i>

Tabel Lampiran 5.36 Anova kata “jalan”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	1.6953	0.1968	3.96676	<i>Rejected</i>
<i>Formant 2</i>	3.03255	0.08565	3.96676	<i>Rejected</i>
<i>Formant 3</i>	9.7575	0.0025	3.96676	<i>Rejected</i>
<i>Formant 4</i>	0.06781	0.79526	3.96847	<i>Accepted</i>
<i>Formant 5</i>	5.79916	0.02407	4.25967	<i>Rejected</i>
<i>Bandwith 1</i>	17.29248	6.26722	3.1153	<i>Rejected</i>
<i>Bandwith 2</i>	0.49553	0.48362	3.96676	<i>Rejected</i>
<i>Bandwith 3</i>	2.12603	0.14893	3.96676	<i>Rejected</i>

<i>Bandwith 4</i>	1.54371	0.21793	3.96847	<i>Rejected</i>
<i>Bandwith 5</i>	0.86527	0.36153	4.2596	<i>Rejected</i>

Tabel Lampiran 5.37 Anova kata “cendrawasih”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	3.3413	0.06934	3.89774	<i>Rejected</i>
<i>Formant 2</i>	6.99907	0.00893	3.89774	<i>Rejected</i>
<i>Formant 3</i>	36.7843	8.54619	3.89774	<i>Rejected</i>
<i>Formant 4</i>	18.6519	2.7256522	3.8995	<i>Rejected</i>
<i>Formant 5</i>	2.95514	0.0928	4.06704	<i>Rejected</i>
<i>Bandwith 1</i>	0.24848	0.6188	3.89774	<i>Rejected</i>
<i>Bandwith 2</i>	4.20694	0.04182	3.89774	<i>Rejected</i>
<i>Bandwith 3</i>	0.46127	0.497969	3.89774	<i>Rejected</i>
<i>Bandwith 4</i>	4.50396	0.03533	3.8995	<i>Rejected</i>
<i>Bandwith 5</i>	1.12675	0.2944	4.06704	<i>Rejected</i>

Tabel Lampiran 5.38 Anova kata “nomor”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.1312	0.7178	3.9236	<i>Accepted</i>
<i>Formant 2</i>	19.4372	2.35024	3.9236	<i>Rejected</i>
<i>Formant 3</i>	9.50106	0.00257	3.9236	<i>Rejected</i>
<i>Formant 4</i>	0.30662	0.5808	3.9243	<i>Accepted</i>
<i>Formant 5</i>	2.81596	0.0976	3.9739	<i>Rejected</i>
<i>Bandwith 1</i>	3.22199	0.07528	3.9236	<i>Rejected</i>
<i>Bandwith 2</i>	1.70502	0.19423	3.9236	<i>Rejected</i>
<i>Bandwith 3</i>	12.1223	0.0007	3.9236	<i>Rejected</i>
<i>Bandwith 4</i>	4.80395	0.03042	3.92433	<i>Rejected</i>
<i>Bandwith 5</i>	1.005901	0.31924	3.973897	<i>Rejected</i>

Tabel Lampiran 5.39 Anova kata “sembilan”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	0.55174	0.45973	3.95738	<i>Rejected</i>
<i>Formant 2</i>	2.42707	0.123107	3.95738	<i>Rejected</i>
<i>Formant 3</i>	0.08152	0.775967	3.95738	<i>Accepted</i>
<i>Formant 4</i>	0.6477	0.42348	3.96847	<i>Rejected</i>
<i>Formant 5</i>	0.43947	0.51212	4.14909	<i>Accepted</i>

<i>Bandwith 1</i>	0.78196	0.379126	3.95738	<i>Rejected</i>
<i>Bandwith 2</i>	0.9040653	0.344488	3.95738	<i>Rejected</i>
<i>Bandwith 3</i>	0.00306	0.95597	3.95738	<i>Accepted</i>
<i>Bandwith 4</i>	0.01784	0.98231	3.11698	<i>Accepted</i>
<i>Bandwith 5</i>	0.0933	0.911146	3.30481	<i>Accepted</i>

Tabel Lampiran 5.40 Anova kata “belas”

Jenis Formant	Ratio F	P-Value	F Critical	Conclusion
<i>Formant 1</i>	36.8047	3.97816	3.9588	<i>Rejected</i>
<i>Formant 2</i>	0.04478	0.83294	3.9588	<i>Accepted</i>
<i>Formant 3</i>	5.0727	0.02701	3.9588	<i>Rejected</i>
<i>Formant 4</i>	2.49768	0.11791	3.9588	<i>Rejected</i>
<i>Formant 5</i>	0.0476	0.82863	4.14909	<i>Accepted</i>
<i>Bandwith 1</i>	0.28452	0.595212	3.9588	<i>Accepted</i>
<i>Bandwith 2</i>	30.9409	3.32963	3.9588	<i>Rejected</i>
<i>Bandwith 3</i>	1.6345	0.2047	3.9588	<i>Rejected</i>
<i>Bandwith 4</i>	11.2368	0.0012	3.9588	<i>Rejected</i>
<i>Bandwith 5</i>	3.04657	0.0905	4.14909	<i>Rejected</i>

c. Analisis *Likelihood Ratio* Rekaman Suara B dan Rekaman Suara CTabel Lampiran 5.41 *Likelihood Ratio* kata “hari”

Formant kata ‘hari’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.3796	0.6204	0.611863	<i>Moderate evidence against</i>
F2	1.47194	-0.47194	-3.11891	<i>Very Strong evidence againts</i>
F3	0.00254	0.99746	0.002546	<i>Strong evidence againts</i>
F4	1.9872	-0.9872	-2.01297	<i>Very Strong evidence againts</i>
F5	1	0	1	<i>Very Strong evidence againts</i>
B1	1.745168	-0.74517	-2.34198	<i>Very Strong evidence againts</i>
B2	0.25136	0.74864	0.335756	<i>Moderate evidence against</i>
B3	0.69624	0.30376	2.292073	<i>Limited evidence to support</i>

B4	0.171457	0.828543	0.206938	<i>Moderate evidence against</i>
B5	1	0	1	<i>Very Strong evidence against</i>

Tabel Lampiran 5.42 Likelihood Ratio kata “ini”

Formant kata ‘ini’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.2347	0.7653	0.306677	<i>Moderate evidence against</i>
F2	0.034453	0.965547	0.035682	<i>Moderately strong evidence against</i>
F3	0.00057	0.99943	0.00057	<i>Strong evidence against</i>
F4	0.0017	0.9983	0.001703	<i>Strong evidence against</i>
F5	0.23005	0.76995	0.298786	<i>Moderate evidence against</i>
B1	0.7173	0.2827	2.537319	<i>Limited evidence to support</i>
B2	0.6695	0.3305	2.025719	<i>Limited evidence to support</i>
B3	0.0002	0.9998	0.0002	<i>Strong evidence against</i>
B4	0.29569	0.70431	0.419829	<i>Moderate evidence against</i>
B5	0.5104	0.4896	1.042484	<i>Limited evidence to against</i>

Tabel Lampiran 5.43 Likelihood Ratio kata “barang”

Formant kata ‘barang’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	5.65290	-4.6529	-1.21492	<i>Very Strong evidence against</i>
F2	0.180003	0.819997	0.219517	<i>Moderate evidence against</i>
F3	0.0393	0.9607	0.040908	<i>Moderately strong evidence against</i>
F4	0.0396	0.9604	0.041233	<i>Moderately strong evidence against</i>
F5	0.01143	0.98857	0.011562	<i>Moderately strong evidence against</i>

B1	0.5984	0.4016	1.49004	<i>Limited evidence to support</i>
B2	9.58688	-8.58688	-1.11646	<i>Very Strong evidence againsts</i>
B3	0.4653	0.5347	0.870208	<i>Moderate evidence against</i>
B4	0.6336	0.3664	1.729258	<i>Limited evidence to support</i>
B5	0.7199	0.2801	2.570154	<i>Limited evidence to support</i>

Tabel Lampiran 5.44 *Likelihood Ratio* kata “sudah”

Formant kata ‘sudah’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.6443	0.3557	1.811358	<i>Limited evidence to support</i>
F2	0.0177	0.9823	0.018019	<i>Moderately Strong evidence against</i>
F3	0.50592	0.49408	1.023964	<i>Limited evidence to support</i>
F4	0.8008	0.1992	4.02008	<i>Limited evidence to support</i>
F5	1	0	1	<i>Very Strong evidence againsts</i>
B1	0.0095	0.9905	0.009591	<i>Very Strong evidence againsts</i>
B2	4.55497	-3.55497	-1.2813	<i>Very Strong evidence againsts</i>
B3	0.000996	0.999004	0.000997	<i>Strong evidence againsts</i>
B4	0.04166	0.95834	0.043471	<i>Moderately Strong evidence against</i>
B5	1	0	1	<i>Very Strong evidence againsts</i>

Tabel Lampiran 5.45 *Likelihood Ratio* kata “ada”

Formant kata ‘ada’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	5.83716	-4.83716	-1.20673	<i>Very Strong evidence againsts</i>
F2	0.1712	0.8288	0.206564	<i>Moderate evidence against</i>

F3	0.0482	0.9518	0.050641	<i>Moderately Strong evidence against</i>
F4	0.1594	0.8406	0.189626	<i>Moderate evidence against</i>
F5	0.37956	0.62044	0.611759	<i>Moderate evidence against</i>
B1	0.1202	0.8798	0.136622	<i>Moderate evidence against</i>
B2	0.0251	0.9749	0.025746	<i>Moderately Strong evidence against</i>
B3	9.74162	-8.74162	-1.1144	<i>Very Strong evidence againsts</i>
B4	1.44192	-0.44192	-3.26285	<i>Very Strong evidence againsts</i>
B5	0.1332	0.8668	0.153669	<i>Moderate evidence against</i>

Tabel Lampiran 5.46 *Likelihood Ratio* kata “kalau”

Formant kata ‘kalau’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.4196	0.5804	0.72295	<i>Moderate evidence against</i>
F2	7.11868	-6.11868	-1.16343	<i>Very Strong evidence againsts</i>
F3	0.04341	0.95659	0.04538	<i>Moderately Strong evidence against</i>
F4	0.29145	0.70855	0.411333	<i>Moderate evidence against</i>
F5	1.21028	-0.21028	-5.75556	<i>Very Strong evidence againsts</i>
B1	0.00507	0.99493	0.005096	<i>Strong evidence againsts</i>
B2	2.16596	-1.16596	-1.85766	<i>Very Strong evidence againsts</i>
B3	0.0542	0.9458	0.057306	<i>Moderately Strong evidence against</i>
B4	0.24876	0.75124	0.331133	<i>Moderate evidence against</i>
B5	0.0431	0.9569	0.045041	<i>Moderately Strong evidence against</i>

Tabel Lampiran 5.47 *Likelihood Ratio* kata “bisa”

Forman t kata 'bisa'	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.4196	0.5804	0.72295	<i>Moderate evidence against</i>
F2	7.11868	-6.11868	-1.16343	<i>Very Strong evidence against</i>
F3	0.04341	0.95659	0.04538	<i>Moderately Strong evidence against</i>
F4	0.29145	0.70855	0.411333	<i>Moderate evidence against</i>
F5	1.21028	-0.21028	-5.75556	<i>Very Strong evidence against</i>
B1	0.00507	0.99493	0.005096	<i>Strong evidence against</i>
B2	2.16596	-1.16596	-1.85766	<i>Very Strong evidence against</i>
B3	0.0542	0.9458	0.057306	<i>Moderately Strong evidence against</i>
B4	0.24876	0.75124	0.331133	<i>Moderate evidence against</i>
B5	0.0431	0.9569	0.045041	<i>Moderately Strong evidence against</i>

Tabel Lampiran 5.48 *Likelihood Ratio* kata “sore”

Forman t kata 'sore'	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.00513	0.99487	0.005156	<i>Strong evidence against</i>
F2	0.26806	0.73194	0.366232	<i>Moderate evidence against</i>
F3	0.04778	0.95222	0.050177	<i>Moderately Strong evidence against</i>
F4	1.20238	-0.20238	-5.9412	<i>Very Strong evidence against</i>
F5	0.94844	0.05156	18.39488	<i>Moderate evidence to support</i>
B1	1.279254	-0.27925	-4.58097	<i>Very Strong evidence against</i>
B2	0.99218	0.00782	126.8772	<i>Moderately Strong evidence to support</i>
B3	0.0303	0.9697	0.031247	<i>Moderately Strong evidence against</i>

B4	0.17396	0.82604	0.210595	<i>Moderate evidence against</i>
B5	0.12183	0.87817	0.138732	<i>Moderate evidence against</i>

Tabel Lampiran 5.49 *Likelihood Ratio* kata “ini”

Formant kata ‘ini’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.38411	0.61589	0.623667	<i>Moderate evidence against</i>
F2	9.808413	-8.80841	-1.11353	<i>Very Strong evidence against</i>
F3	1.33791	-0.33791	-3.95937	<i>Very Strong evidence against</i>
F4	1.823208	-0.82321	-2.21476	<i>Very Strong evidence against</i>
F5	0.02224	0.97776	0.022746	<i>Moderately Strong evidence against</i>
B1	0.24266	0.75734	0.320411	<i>Moderate evidence against</i>
B2	0.001056	0.998944	0.001057	<i>Strong evidence against</i>
B3	0.0765	0.9235	0.082837	<i>Moderately Strong evidence against</i>
B4	0.50282	0.49718	1.011344	<i>Limited evidence to support</i>
B5	0.06915	0.93085	0.074287	<i>Moderately Strong evidence against</i>

Tabel Lampiran 5.50 *Likelihood Ratio* kata “datang”

Formant kata ‘datang’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.10739	0.89261	0.12031	<i>Moderate evidence against</i>
F2	0.00022	0.99978	0.00022	<i>Strong evidence against</i>
F3	0.15477	0.84523	0.18311	<i>Moderate evidence against</i>
F4	0.105025	0.894975	0.11735	<i>Moderate evidence against</i>
F5	0.04967	0.95033	0.052266	<i>Moderately Strong evidence against</i>

B1	0.0807243	0.919276	0.087813	<i>Moderately Strong evidence against</i>
B2	0.439655	0.560345	0.784615	<i>Moderate evidence against</i>
B3	0.193183	0.806817	0.239438	<i>Moderate evidence against</i>
B4	0.012536	0.987464	0.012695	<i>Moderately Strong evidence against</i>
B5	0.056596	0.943404	0.059991	<i>Moderately Strong evidence against</i>

Tabel Lampiran 5.51 Likelihood Ratio kata “ke”

Formant kata ‘ke’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.499336	0.500664	0.997348	<i>Moderate evidence against</i>
F2	0.412349	0.587651	0.70169	<i>Moderate evidence against</i>
F3	0.907334	0.092666	9.791445	<i>Limited evidence to support</i>
F4	0.680296	0.319704	2.127893	<i>Limited evidence to support</i>
F5	1	0	1	<i>Very Strong evidence againsts</i>
B1	0.42153	0.57847	0.728698	<i>Moderate evidence against</i>
B2	0.306448	0.693552	0.441853	<i>Moderate evidence against</i>
B3	0.055995	0.944005	0.059316	<i>Moderately Strong evidence against</i>
B4	0.1956422	0.804358	0.243228	<i>Moderate evidence against</i>
B5	1	0	1	<i>Very Strong evidence againsts</i>

Tabel Lampiran 5.52 Likelihood Ratio kata “rumah”

Formant kata ‘rumah’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	5.158723	-4.15872	-1.24046	<i>Very Strong evidence againsts</i>
F2	0.038752	0.961248	0.040314	<i>Moderately Strong evidence againsts</i>

F3	0.4500573	0.549943	0.818371	<i>Moderate evidence against</i>
F4	8.38289486	-7.38289	-1.13545	<i>Very Strong evidence against</i>
F5	0.0084981	0.991502	0.008571	<i>Strong evidence against</i>
B1	0.00037	0.99963	0.00037	<i>Strong evidence against</i>
B2	0.032343	0.967657	0.033424	<i>Moderately Strong evidence against</i>
B3	0.023296	0.976704	0.023852	<i>Moderately Strong evidence against</i>
B4	0.00024	0.99976	0.00024	<i>Strong evidence against</i>
B5	0.14666	0.85334	0.171866	<i>Moderate evidence against</i>

Tabel Lampiran 5.53 *Likelihood Ratio* kata “ambil”

Formant kata ‘ambil’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	1.06237	-0.06237	-17.0333	<i>Very Strong evidence against</i>
F2	0.5183	0.4817	1.075981	<i>Limited evidence to support</i>
F3	0.05795	0.94205	0.061515	<i>Moderately Strong evidence against</i>
F4	0.000104	0.999896	0.000104	<i>Strong evidence against</i>
F5	0.38637	0.61363	0.629647	<i>Moderate evidence against</i>
B1	0.10711	0.89289	0.119959	<i>Moderate evidence against</i>
B2	0.42177	0.57823	0.729416	<i>Moderate evidence against</i>
B3	0.19169	0.80831	0.237149	<i>Moderate evidence against</i>
B4	0.8643	0.1357	6.369197	<i>Limited evidence to support</i>
B5	0.11501	0.88499	0.129956	<i>Moderate evidence against</i>

Tabel Lampiran 5.54 *Likelihood Ratio* kata “barang”

Formant kata ‘barang’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.08738	0.91262	0.095746	Moderately Strong evidence against
F2	3.6913	-2.6913	-1.37157	Very Strong evidence against
F3	2.21551	-1.21551	-1.8227	Very Strong evidence against
F4	0.0023	0.9977	0.002305	Moderately Strong evidence against
F5	0.13194	0.86806	0.151994	Moderate evidence against
B1	0.95102	0.04898	19.4165	Moderate evidence to support
B2	0.00013	0.99987	0.00013	Strong evidence against
B3	0.25717	0.74283	0.346203	Moderate evidence against
B4	0.049404	0.950596	0.051972	Moderately Strong evidence against
B5	0.23927	0.76073	0.314527	Moderate evidence against

Tabel Lampiran 5.55 *Likelihood Ratio* kata “di”

Formant kata ‘di’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.0253	0.9747	0.025957	Moderately Strong evidence against
F2	0.0511	0.9489	0.053852	Moderately Strong evidence against
F3	0.0995	0.9005	0.110494	Moderate evidence against
F4	0.18308	0.81692	0.22411	Moderate evidence against
F5	1	0	1	Very Strong evidence against
B1	0.24292	0.75708	0.320864	Moderate evidence against
B2	0.98652	0.01348	73.18398	Moderate evidence to support
B3	0.42207	0.57793	0.730313	Moderate evidence against

B4	0.60597	0.39403	1.537878	<i>Limited evidence to support</i>
B5	1	0	1	<i>Very Strong evidence against</i>

Tabel Lampiran 5.56 Likelihood Ratio kata “jalan”

Formant kata ‘jalan’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.1968	0.8032	0.24502	<i>Moderate evidence against</i>
F2	0.08565	0.91435	0.093673	<i>Moderately Strong evidence against</i>
F3	0.0025	0.9975	0.002506	<i>Strong evidence against</i>
F4	0.79526	0.20474	3.884243	<i>Limited evidence to support</i>
F5	0.02407	0.97593	0.024664	<i>Moderately Strong evidence against</i>
B1	6.26722	-5.26722	-1.18985	<i>Very Strong evidence against</i>
B2	0.48362	0.51638	0.936558	<i>Moderate evidence against</i>
B3	0.14893	0.85107	0.174991	<i>Moderate evidence against</i>
B4	0.21793	0.78207	0.278658	<i>Moderate evidence against</i>
B5	0.36153	0.63847	0.566244	<i>Moderate evidence against</i>

Tabel Lampiran 5.57 Likelihood Ratio kata “cendrawasih”

Formant kata ‘cendrawasih’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.06934	0.93066	0.074506	<i>Moderately Strong evidence against</i>
F2	0.00893	0.99107	0.00901	<i>Strong evidence against</i>
F3	8.54619	-7.54619	-1.13252	<i>Very Strong evidence against</i>
F4	2.7256522	-1.72565	-1.57949	<i>Very Strong evidence against</i>

F5	0.0928	0.9072	0.102293	<i>Moderate evidence against</i>
B1	0.6188	0.3812	1.623295	<i>Limited evidence to support</i>
B2	0.04182	0.95818	0.043645	<i>Moderately Strong evidence against</i>
B3	0.497969	0.502031	0.991909	<i>Moderate evidence against</i>
B4	0.03533	0.96467	0.036624	<i>Moderately Strong evidence against</i>
B5	0.2944	0.7056	0.417234	<i>Moderate evidence against</i>

Tabel Lampiran 5.58 *Likelihood Ratio* kata “nomor”

Formant kata ‘nomor’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	0.7178	0.2822	2.543586	<i>Limited evidence to support</i>
F2	2.35024	-1.35024	-1.74061	<i>Very Strong evidence against</i>
F3	0.00257	0.99743	0.002577	<i>Strong evidence against</i>
F4	0.5808	0.4192	1.385496	<i>Limited evidence to support</i>
F5	0.0976	0.9024	0.108156	<i>Moderate evidence against</i>
B1	0.07528	0.92472	0.081408	<i>Moderately Strong evidence against</i>
B2	0.19423	0.80577	0.241049	<i>Moderate evidence against</i>
B3	0.0007	0.9993	0.0007	<i>Strong evidence against</i>
B4	0.03042	0.96958	0.031374	<i>Moderately Strong evidence against</i>
B5	0.31924	0.68076	0.468946	<i>Moderate evidence against</i>

Tabel Lampiran 5.59 *Likelihood Ratio* kata “sembilan”

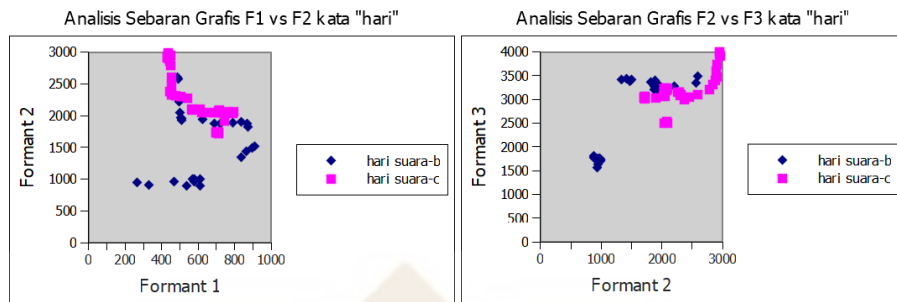
Formant kata ‘sembilan’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
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F1	0.45973	0.54027	0.850926	<i>Moderate evidence against</i>
F2	0.123107	0.876893	0.14039	<i>Moderate evidence against</i>
F3	0.775967	0.224033	3.463628	<i>Limited evidence to support</i>
F4	0.42348	0.57652	0.734545	<i>Moderate evidence against</i>
F5	0.51212	0.48788	1.049684	<i>Limited evidence to support</i>
B1	0.379126	0.620874	0.610633	<i>Moderate evidence against</i>
B2	0.344488	0.655512	0.525525	<i>Moderate evidence against</i>
B3	0.95597	0.04403	21.71179	<i>Moderate evidence to support</i>
B4	0.98231	0.01769	55.52911	<i>Moderate evidence to support</i>
B5	0.911146	0.088854	10.25442	<i>Moderate evidence to support</i>

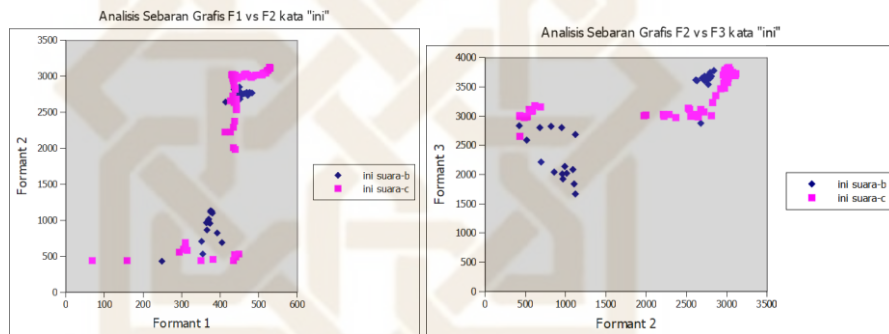
Tabel Lampiran 5.60 *Likelihood Ratio* kata “belas”

Formant kata ‘belas’	P-value = p (E Hp)	p (E Hd)	LR	Verbal Statement
F1	3.97816	-2.97816	-1.33578	<i>Very Strong evidence against</i>
F2	0.83294	0.16706	4.985873	<i>Limited evidence to support</i>
F3	0.02701	0.97299	0.02776	<i>Moderately Strong evidence against</i>
F4	0.11791	0.88209	0.133671	<i>Moderate evidence against</i>
F5	0.82863	0.17137	4.835327	<i>Limited evidence to support</i>
B1	0.595212	0.404788	1.470429	<i>Limited evidence to support</i>
B2	3.32963	-2.32963	-1.42925	<i>Very Strong evidence against</i>
B3	0.2047	0.7953	0.257387	<i>Moderate evidence against</i>
B4	0.0012	0.9988	0.001201	<i>Moderately Strong evidence against</i>
B5	0.0905	0.9095	0.099505	<i>Moderately Strong evidence against</i>

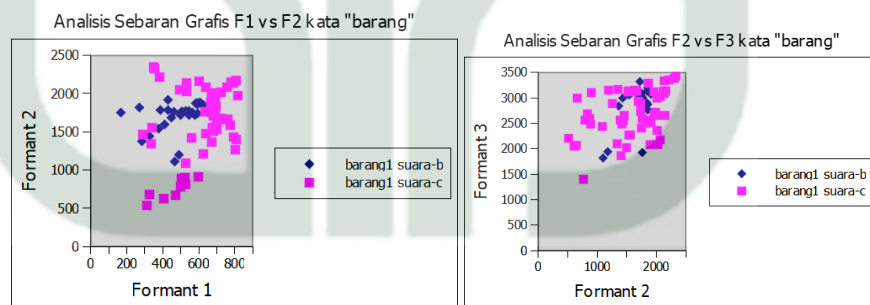
d. *Graphical Distribution* Rekaman Suara B dan Rekaman Suara C



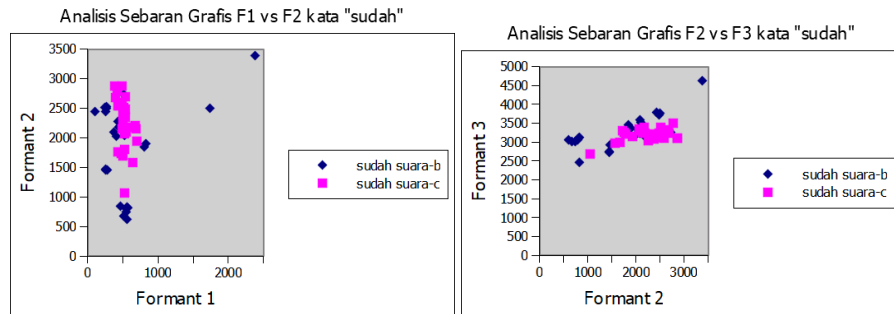
Gambar Lampiran 5.1 Sebaran Grafis kata "hari"



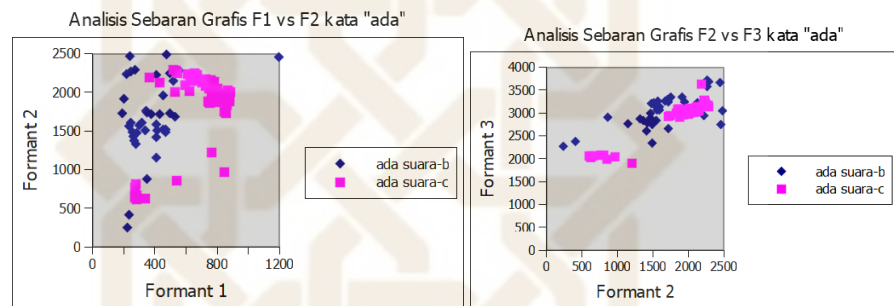
Gambar Lampiran 5.2 Sebaran Grafis kata "ini"



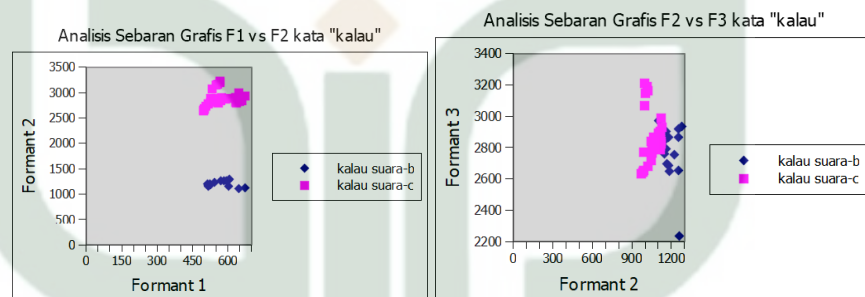
Gambar Lampiran 5.3 Sebaran Grafis kata "barang"



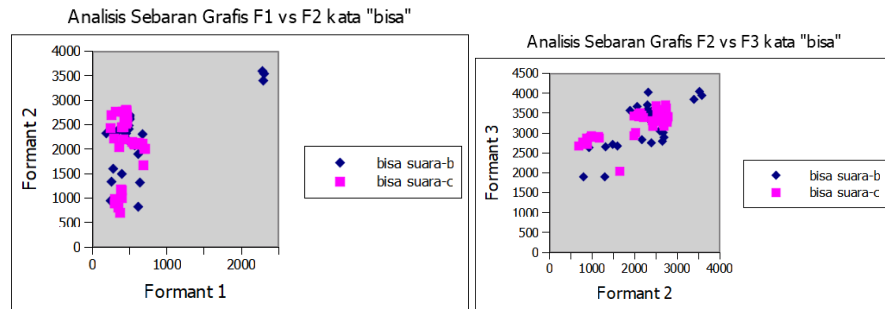
Gambar Lampiran 5.4 Sebaran Grafis kata “sudah”



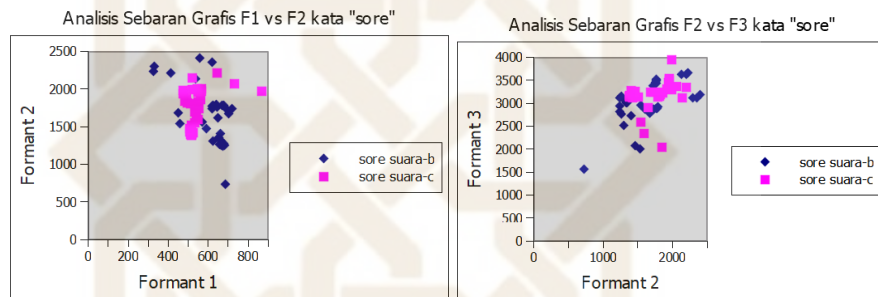
Gambar Lampiran 5.5 Sebaran Grafis kata “ada”



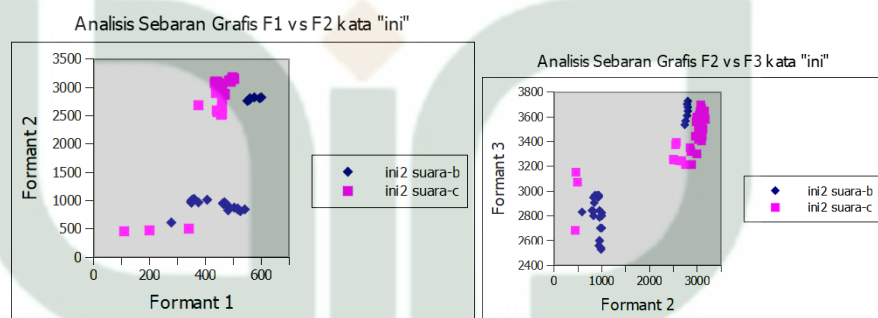
Gambar Lampiran 5.6 Sebaran Grafis kata “kalau”



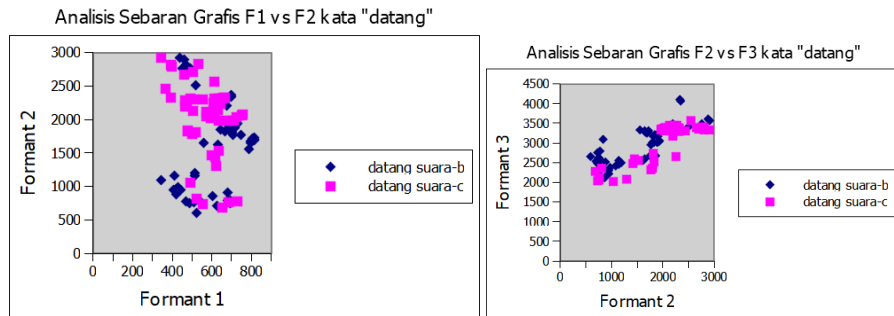
Gambar Lampiran 5.7 Sebaran Grafis kata “bisa”



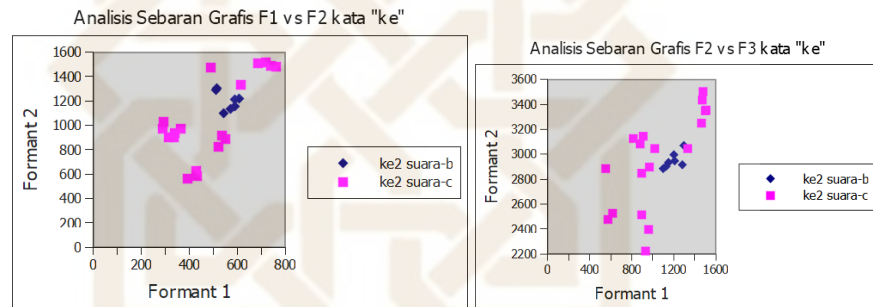
Gambar Lampiran 5.8 Sebaran Grafis kata “sore”



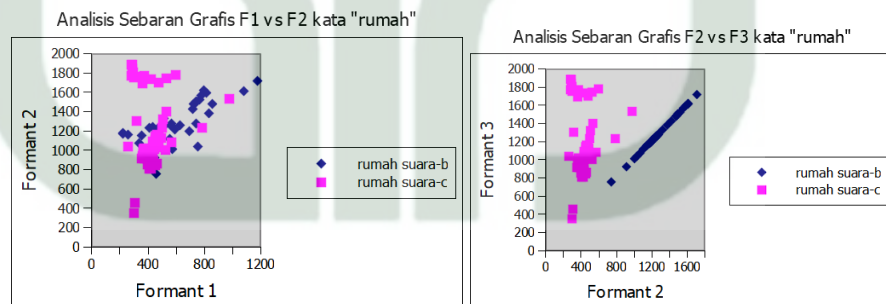
Gambar Lampiran 5.9 Sebaran Grafis kata “ini”



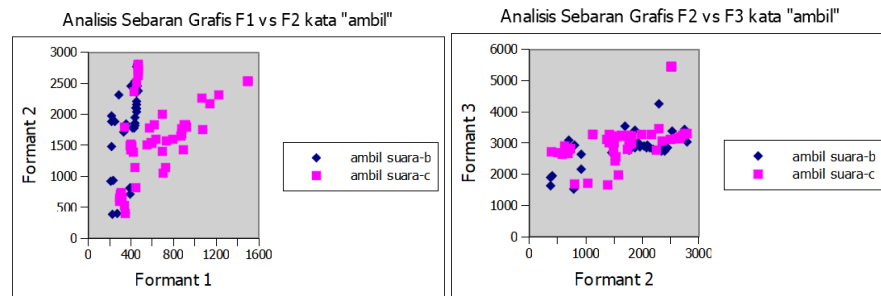
Gambar Lampiran 5.10 Sebaran Grafis kata “datang”



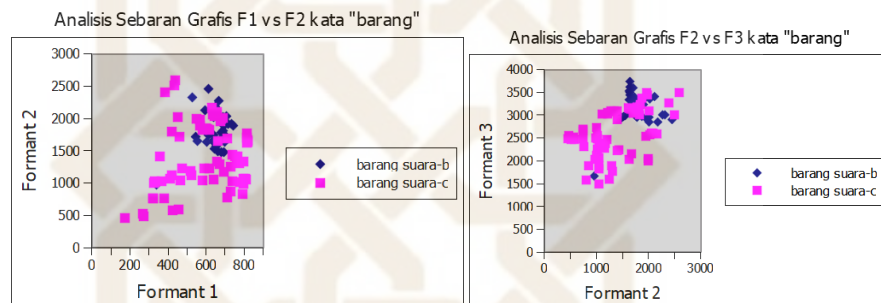
Gambar Lampiran 5.11 Sebaran Grafis kata “ke”



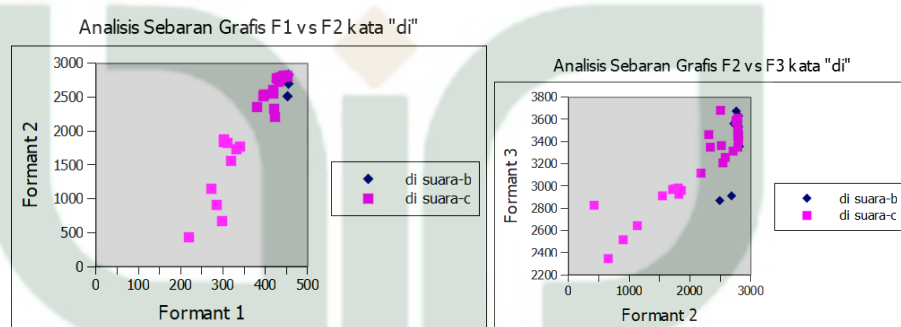
Gambar Lampiran 5.12 Sebaran Grafis kata “rumah”



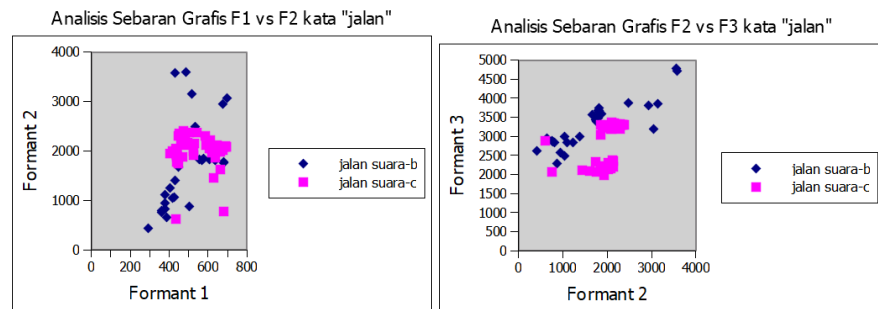
Gambar Lampiran 5.13 Sebaran Grafis kata “ambil”



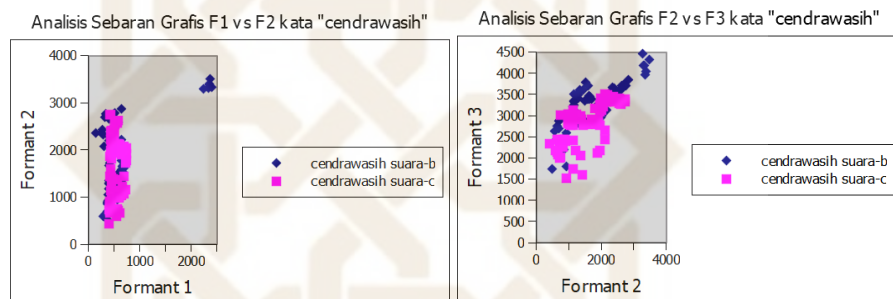
Gambar Lampiran 5.14 Sebaran Grafis kata “barang”



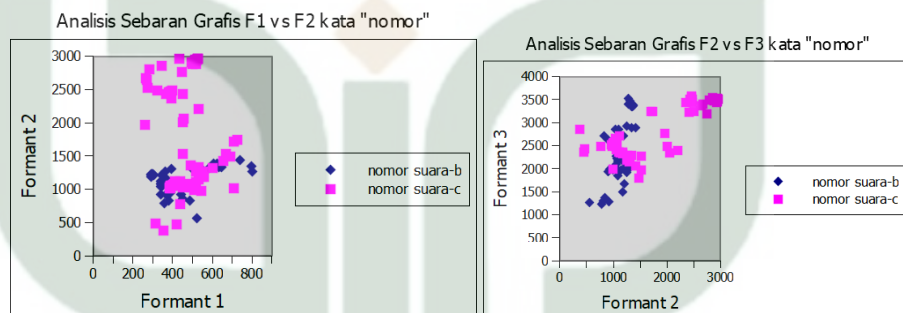
Gambar Lampiran 5.15 Sebaran Grafis kata “di”



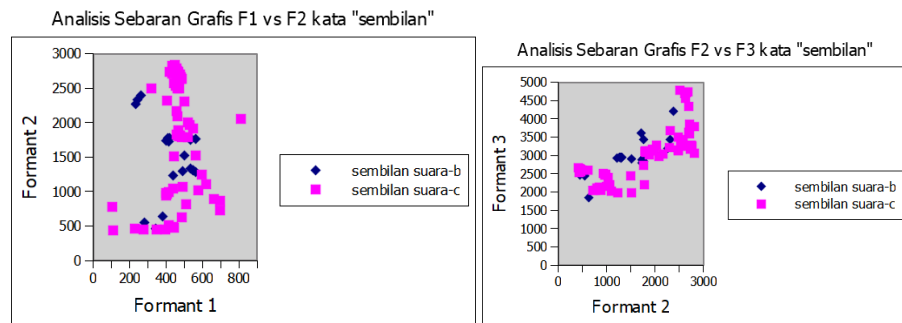
Gambar Lampiran 5.16 Sebaran Grafis kata "jalan"



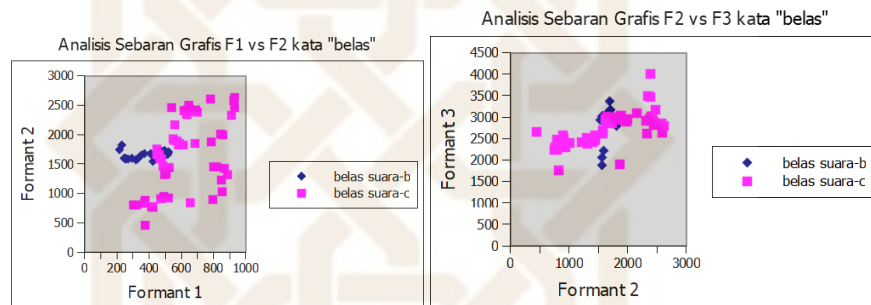
Gambar Lampiran 5.17 Sebaran Grafis kata "cendrawasih"



Gambar Lampiran 5.18 Sebaran Grafis kata "nomor"

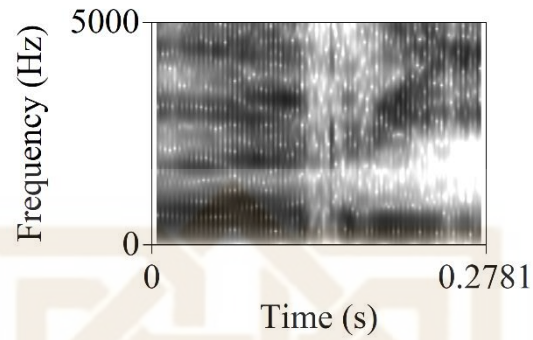


Gambar Lampiran 5.19 Sebaran Grafis kata "sembilan"

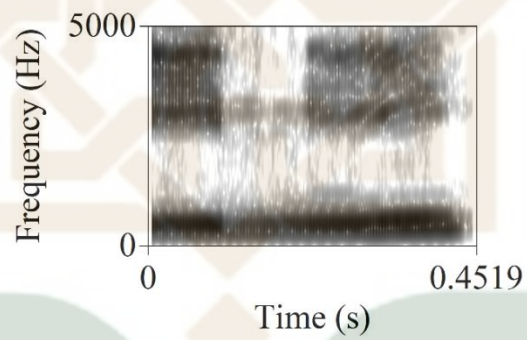


Gambar Lampiran 5.20 Sebaran Grafis kata "belas"

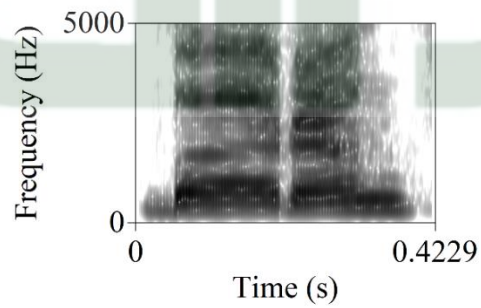
e. Analisis Spektrogram Rekaman Suara C



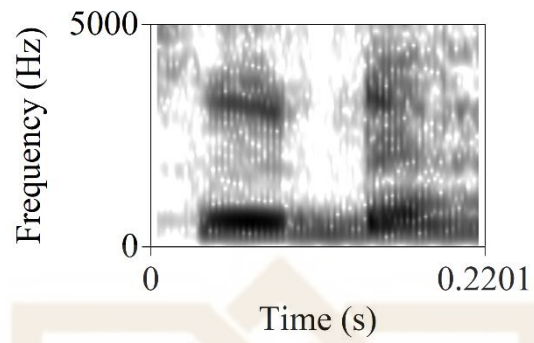
Gambar Lampiran 5.21 Spektrogram kata "hari"



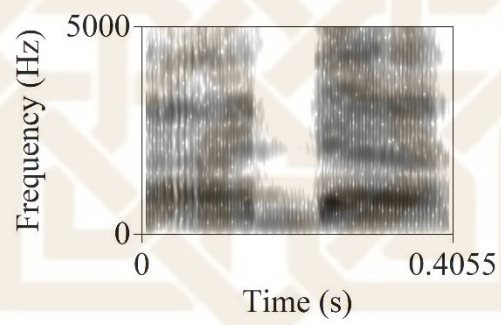
Gambar Lampiran 5.22 Spektrogram kata "ini"



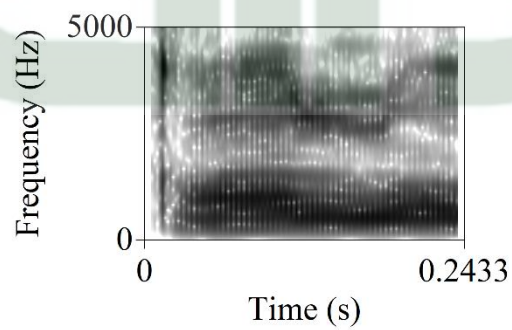
Gambar Lampiran 5.23 Spektrogram kata "barang"



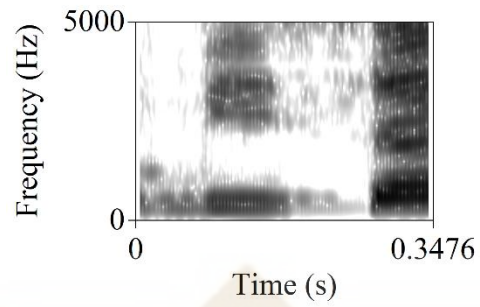
Gambar Lampiran 5.24 Spektogram kata “sudah”



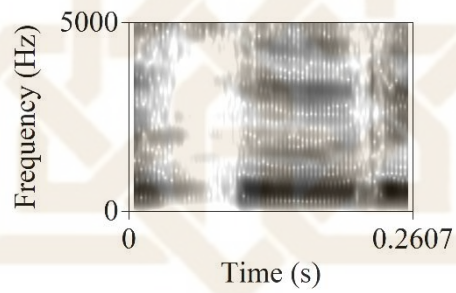
Gambar Lampiran 5.25 Spektogram kata “ada”



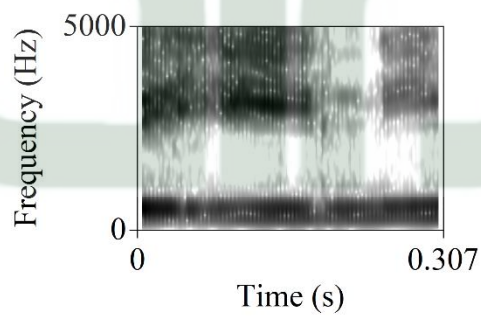
Gambar Lampiran 5.26 Spektogram kata “kalau”



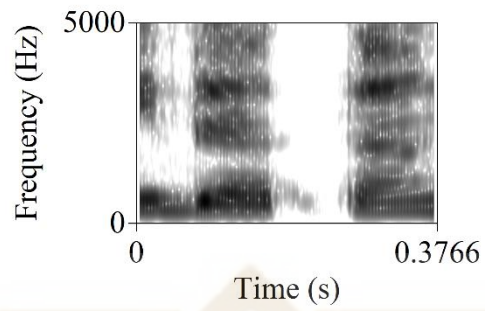
Gambar Lampiran 5.27 Spektogram kata "bisa"



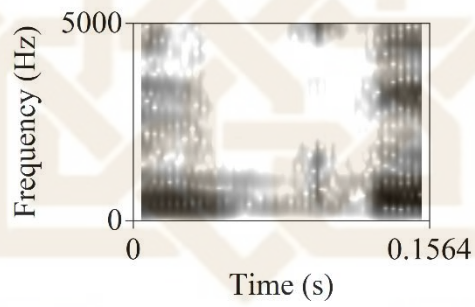
Gambar Lampiran 5.28 Spektogram kata "sore"



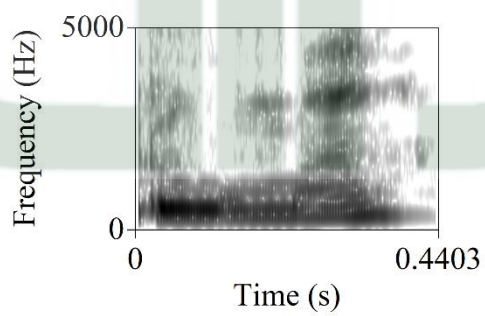
Gambar Lampiran 5.29 Spektogram kata "ini"



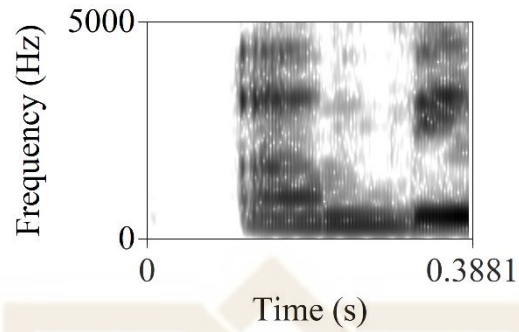
Gambar Lampiran 5.30 Spektogram kata “datang”



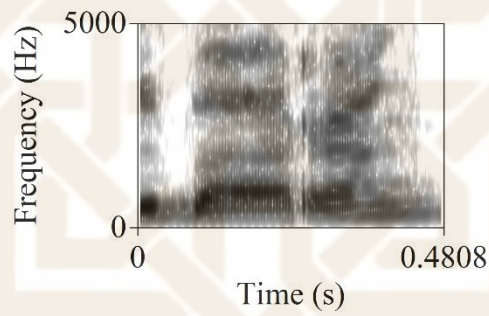
Gambar Lampiran 5.31 Spektogram kata “ke”



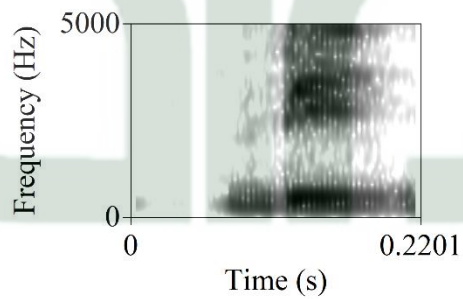
Gambar Lampiran 5.32 Spektogram kata “rumah”



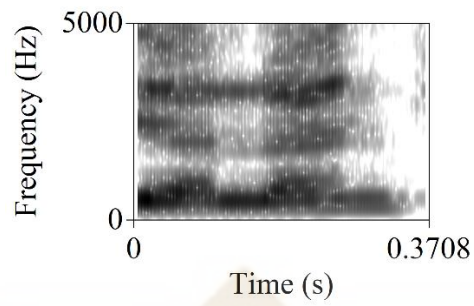
Gambar Lampiran 5.33 Spektogram kata “ambil”



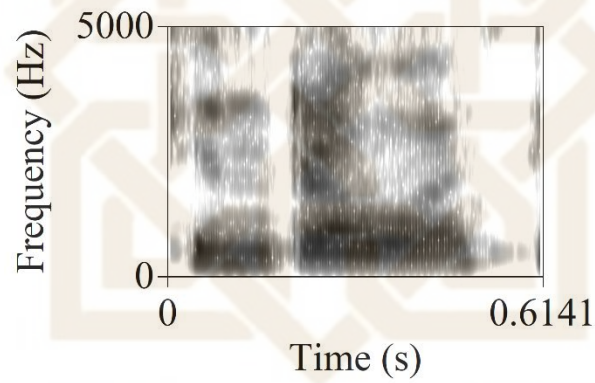
Gambar Lampiran 5.34 Spektogram kata “barang”



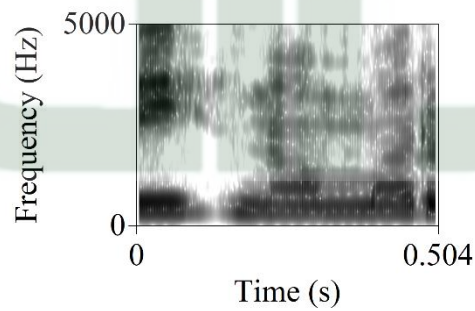
Gambar Lampiran 5.35 Spektogram kata “di”



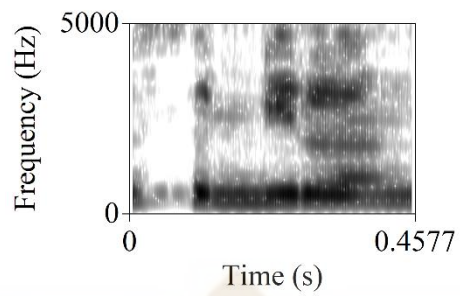
Gambar Lampiran 5.36 Spektogram kata “jalan”



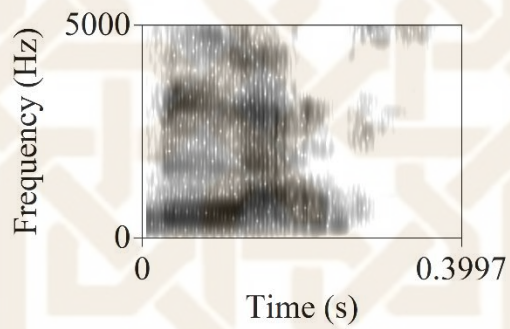
Gambar Lampiran 5.37 Spektogram kata “cendrawasih”



Gambar Lampiran 5.38 Spektogram kata “nomor”



Gambar Lampiran 5.39 Spektogram kata “sembilan”



Gambar Lampiran 5.40 Spektogram kata “belas”

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