

List of Genetic Units used in the calculation of diversity indices.

{ } = May be part of hotspot

† Extinct G.U. formerly part of present-day Hotspot

469 GUs in sample (approx)

+ 3 Mixed Languages

+ at least 11 Creoles

NB: includes 21 unclassified languages + 16 languages with phylum but not family-level classification that count as GUs

So roughly 430 secure GUs

Abinomn (Isolate)
Achomawi-Atsugewi
Adamawa-Ubangi
Aleut
Algonquian
Amaragic
Amto-Musan
Andoque
Anindilyakwa
Anson Bay
Arauan
Arawakan
Armenian
Arutani-Sape
Atayalic
Athapaskan
Austronesian > Malayo-Polynesian > Javanese
Austronesian >> Central/Eastern Oceanic > South Vanuatu > Aneityum
Austronesian >> Central/Eastern Oceanic > South Vanuatu > Erromanga
Austronesian >> Central/Eastern Oceanic > South Vanuatu > Tanna
Austronesian >> Oceanic > Admiralty

Austronesian >> Oceanic > St. Matthias
Austronesian >>> Western Oceanic > North New Guinea
Austronesian >>> Central/Eastern Oceanic > Southeast Solomons
Austronesian >>> Central/Eastern Oceanic >> Eastern Outer Islands
Austronesian >>> Central Malayo-Polynesian > Aru
Austronesian >>> Central Malayo-Polynesian > Babar
Austronesian >>> Central Malayo-Polynesian > Central Maluku
Austronesian >>> Central Malayo-Polynesian > Southeast Maluku
Austronesian >>> Central Malayo-Polynesian > Teor-Kur
Austronesian >>> Central Malayo-Polynesian > Timor
Austronesian >>> Central Malayo-Polynesian > South Bomberai
Austronesian >>> Central Malayo-Polynesian > West Damar
Austronesian >>> Eastern Malayo-Polynesian > South Halmahera
Austronesian >>> Eastern Malayo-Polynesian > West New Guinea
Austronesian >>> Eastern Malayo-Polynesian >> West New Guinea > Bomberai
Austronesian >>> Remote Oceanic > Loyalty Islands
Austronesian >>> Remote Oceanic > North/Central Vanuatu > East Santo
Austronesian >>> Remote Oceanic > North/Central Vanuatu > Malekula Interior
Austronesian >>> Remote Oceanic > North/Central Vanuatu > Northeast Vanuatu/ Banks Islands
Austronesian >>> Remote Oceanic > New Caledonian > Haeke
Austronesian >>> Remote Oceanic > New Caledonian > North
Austronesian >>> Remote Oceanic > New Caledonian > South
Austronesian >>> Western Oceanic >> Bali-Vitu
Austronesian >>> Western Oceanic >> Huon Gulf
Austronesian >>> Western Oceanic >> New Ireland
Austronesian >>> Western Oceanic >> Ngero-Vitiaz
Austronesian >>> Western Oceanic >> Willaumez
Austronesian >>> Western Oceanic >>> Central Papuan
Austronesian >>> Western Oceanic >>> Markham
Austronesian >>> Western Oceanic >>> North Papuan Mainland-

D'Entrecasteaux
Austronesian >>> Western Oceanic >>>Papuan Tip Nuclear
Austronesian >>> Western Oceanic >>>Papuan Tip Peripheral
Austronesian >>>> East Fijian-Polynesian
Austronesian >Malayo-Polynesian>Central/East>Central Malayo-Polynesian > North Bomberai
Avar-Andic
Awbono-Bayono
Aymaran
Bahnaric
Bantoid
Bantu
Barbacoan>Cocunucan
Berta
Bunaban
Bunun
Burarran
Burmeso (Isolate)
Central Khoisan
Caddoan
Cahuapanan
Camsá
Candoshi-Shapra
Canichana
Cariban
Cayuse†
Cayuvava
Cen Túúm (Isolate)
Cenderawasih Bay
Central East Formosan
Central Western Plains
Chadic
Chapacuran
Chemakuan(†)

Chiapanec-Mangue
Chibchan
Chimariko†
Chinantecan
Chinookan
Choco
Chumash†
Chutkotko-Kamchatkan/Chukchi-Koryak
Coosan†
Costanoan†
Creole
Creole
Creole
Creole
Creole (Afro-Seminole)
Creole (Aukan, Kwinti, Sranan, Saramaccan, Palenquero)
Creole (Bantu-Portuguese)
Cross River
Cushitic
Dargi
Djauanic
Djeragan/Jarragan
East Bird's Head : Meax
East Bird's Head: Manikion
Eastern Jebel
East Papuan > Bougainville > East
East Papuan > Bougainville > West
East Papuan > Reefs Island-Santa Cruz
East Papuan > Yele-Solomons-New Britain > New Britain
East Papuan > Yele-Solomons-New Britain > Yele-Solomons > Solomons
East Papuan > Yele-Solomons-New Britain > Yele
Eastern Daly
East Sudanic> Nubian

East Sudanic > Western
Eskimo
Esselen†
Eyak
Finnic
Fur
Gagudjuan
Garr[a]wan
Geelvink Bay > East
Geelvink Bay > Lakes Plain
Geelvink Bay > Yawa
Germanic
Giimbiyu/Geimbiyu
Guahiban
Guiacuruan
Gumuz
Gunabidjian/Ndjébbana
Gunwinyguan: Gunwinggic
Guugu Yimidhirr
Hadza
Haida
Harakmbet
Hibito-Cholon(†)
Hmongic
Huavean
Ijoid
Indo-Aryan
Indo-European > Germanic
Indo-European > Romance
Iranian
Iroquoian
Itelmen
Itonama
Jarawan

Jingpho-Konyak-Bodo
Jingulu/Djingili
Jivaroan
Jukunoid
Kadai
Kainji
Kalapuyan†
Karkar-Yuri (Isolate)
Kartvelian
Karuk
Katuic
Katukinan(†)
Keresan
Khmeric
Khmuic
Kiowa
Klamath-Modoc†
Koman
Kordofanian > Talodi
Kordofanian > Heiban
Kordofanian > Katla
Kuliak
Kunama
Kutenai/Kootenay
Kwomtari-Baibai > Baibai
Kwomtari-Baibai > Kwomtari
Kwomtari-Baibai > Pyu
Lak
Larragiya/Larrakiya
Leco
Left May
Lenca
Lezgif
Limilngan-Wulna

Lolo-Burmese
Lower Mamberamo
Lule-Vilela
Macro-Gê: Bororô
Macro-Gê: Botocudo
Macro-Gê: Chiquito
Macro-Gê: Ge-Kaingang
Macro-Gê: Guato
Macro-Gê: Maxakalí
Macro-Gê: Opaye
Macro-Gê: Yabuti
Maiduan
Maku
Malayic
Mambiloid North Bantoid
Mangarrayi
Mangic
Maran
Mascoian
Matacoan
Mayan
Meso-Philippine
Micronesian
Mienic
Mindi: Djamindjungan
Mindi: Wambayan/Ngurlun
Misumalpan
Miwokan
Mixe
Mixed Language (Kallawaya)
Mixed Language (Lomavren)
Mixed-Language (Ma'a/Mbugu)
Mixtecan
Molala†

Mongolic
Monic
Movima
Muniche
Muskogean
Nakh
Nakkaran
Nambiquaran
Ngalkbun/Dalabon
Nilo-Saharan > Central Sudanic > Western
Nilotic
Nivkh
Northern Daly
Northern East Formosan
Northern Khoisan
Northern Philippine
Northwest Caucasian
Northwest Formosan
Nunggubuyu
Nyulnyulan
Odiai (Isolate)
Omotic
Otopamean > Chichimec
Otopamean > Matlatzincan
Otopamean > Otomian
Paez
Paiwanic
Palaungic
Palyuic
Pama-Nyungan: Dyirbalic
Pama-Nyungan: Kala Lagaw Ya
Pama-Nyungan: Lamulamic
Pama-Nyungan: Lardil
Pama-Nyungan: Maric



Pama-Nyungan: Paman
Pama-Nyungan: Southwest
Pama-Nyungan: Wagaya-Warluwaric
Pama-Nyungan: Waramungic
Pama-Nyungan: Yalandyic
Pama-Nyungan: Yanyuwan
Pama-Nyungan: Yidinic
Pama-Nyungan: Yir-Yoront
Pama-Nyungan: Yuulngu
Panoan
Pearic
Peba-Yaguan
Plateau
Pomoan
Popolocan
Puinave
Pumé/Yaruro
Puyuma
Quechuan
Rembarngic
Romance
Rukai
Southern Khoisan
Sahaptian
Salinan†
Salish
Salivan
Samoyedic
Sandawe
Semitic
Sepik-Ramu > Leonhard Schultze > Papi
Sepik-Ramu > Leonhard Schultze > Walio
Sepik-Ramu > Ramu > Goam
Sepik-Ramu > Sepik > Bisi

Sepik-Ramu > Sepik > Middle > Ndu
Sepik-Ramu > Sepik > Middle > Nukuma
Sepik-Ramu > Sepik > Ram
Sepik-Ramu > Sepik > Sepik Hill
Sepik-Ramu > Sepik > Tama
Sepik-Ramu > Sepik > Upper
Sepik-Ramu > Sepik > Yellow River
Shasta
Sinitic
Siouan
Siuslaw†
Sko > Krisa
Sko > Vanimo
Slavic
South Daly
Subtiapa-Tlapanec
Surmic
Tacanan
Taic
Takelma†
Tangkic
Tanoan
Taushiro
Tequistlatecan
Thao Western Plains
Ticuna
Tinigua
Tiwi
Tlingit
Tol
Torricelli > Kombio-Arapesh > Arapesh
Torricelli > Kombio-Arapesh > Kombio
Torricelli > Maimai
Torricelli > Maimai > Beli

Torricelli > Marienberg
Torricelli > Urim
Torricelli > Wapei-Palei > Palei
Torricelli > Wapei-Palei > Urat
Torricelli > Wapei-Palei > Wapei
Torricelli > West Wapei
Totonac-Tepehua
Trans-New Guinea – Main> Central/Western > Mairasi-Tanahmerah
Trans-New Guinea >> South Bird's Head > Konda-Yahadian
Trans-New Guinea > Eleman
Trans-New Guinea > Kaure
Trans-New Guinea > Madang-Adalbert Range > Madang
Trans-New Guinea > Main> Central/Western > Mor
Trans-New Guinea > Mek
Trans-New Guinea > Molof
Trans-New Guinea > Morwap
Trans-New Guinea > Nimboran
Trans-New Guinea > Northern > Border > Bewani
Trans-New Guinea > Northern > Border > Taikat
Trans-New Guinea > Northern > Border > Waris
Trans-New Guinea > Northern > Tor
Trans-New Guinea > Pauwasi [> Western]
Trans-New Guinea > Pauwasi > Eastern
Trans-New Guinea > Senagi
Trans-New Guinea > South Bird's Head –Timor-Alor-Pantar > Timor-Alor-Pantar > Oirata
Trans-New Guinea > Tofanma
Trans-New Guinea > Usku
Trans-New Guinea >> Bulaka River
Trans-New Guinea >> Central/Western > Angan
Trans-New Guinea >> Central/Western > Dem
Trans-New Guinea >> Central/Western > Huon-Finisterre
Trans-New Guinea >> Central/Western > Kayagar
Trans-New Guinea >> Central/Western > Marind

Trans-New Guinea >> Central/Western > Sentani
Trans-New Guinea >> Central/Western > Wissel Lakes-Kemandoga
Trans-New Guinea >> Eastern > Binanderean
Trans-New Guinea >> Eastern > Central/Southeast > Dagan
Trans-New Guinea >> Eastern > Central/Southeast > Goilalan
Trans-New Guinea >> Eastern > Central/Southeast > Koiarian
Trans-New Guinea >> Eastern > Central/Southeast > Mailuan
Trans-New Guinea >> Eastern > Central/Southeast > Manubaran
Trans-New Guinea >> Eastern > Central/Southeast > Yareban
Trans-New Guinea >> South Bird's Head > Inanwatan
Trans-New Guinea >> South Bird's Head >> Central
Trans-New Guinea >> South Bird's Head >> Eastern
Trans-New Guinea >> South Bird's Head >> Western
Trans-New Guinea >> Trans-Fly
Trans-New Guinea >>> Dani-Kwerba
Trans-New Guinea >>> Ok
Trans-New Guinea >>>> Asmat-Kamoro
Trans-New Guinea >>>> Awyu-Dumut
Trans-New Guinea >>>> Momuna
Trans-New Guinea >Main> Central/Western > Central/South New Guinea-Kutubuan > Unclassified
Trans-New Guinea >Main> Central/Western >W. Bomberai
[Trans-New Guinea > Kolopom]
Tsezic
Tsimané (Mosetén)
Tsimshianic
Tsouic
Tucanoan
Tungusic
Tupi: Monde
Tupi: Purubora
Tupi: Tupari
Tupi: Tupi-Guaraní
Turkic

Ugric
Umbugarla-Ngumbur
Unclassified (1) [Na-Meo]
Unclassified (4) (Amikoana; Iapama; Kohoroxitari, Yuwana)
Unclassified (Carabayo; Korubo; Papavô; Uru-Pa-In)
Unclassified (Yauma)
Unclassified Afroasiatic
Unclassified Austroasiatic (4)
Unclassified Bantoid
Unclassified Benue-Congo
Unclassified Malayo-Polynesian (2)
Unclassified Nilo-Saharan (4)
Unclassified S Bantoid (3)
Unclassified WAF
Unclassified WAF
Unclassified WAF
Unclassified WAF
Unclassified WAF
Unclassified WAF
Unclassified WMEL
Unclassified WMEL
Unclassified WMEL
Unclassified WMEL
Unclassified WMEL
Urarina
Uru-Chipaya
Uto-Aztecan
Viet-Muong
Wagiman
Wakashan
Waorani
Wappo
Warao
Waray[an]

Wardaman/Dagoman/Yangman
Washo
West Barkly
West Papuan > Bird's Head > North/Central > Central Bird's Head
West Papuan > Bird's Head > West Bird's Head
West Papuan > Kebar
West Papuan > North Halmahera > North
West Papuan > North Halmahera > South
[West Papuan > Bird's Head > North/Central > North Bird's Head]
[West Papuan > Hatam]
Western Daly
Wintu
Witotoan
Wiyot
Wororan
Yakonan-Alsean†
Yale (Isolate)
Yana
Yangmanic
Yanomam
Yarí/Yurí
Yeniseic
[Y]iwaidjan
Yokutsan
Yuchi
Yukaghir
Yuki
Yuman
Yuracare
Yurok
Zamucoan
Zaparoan
Zapotecan
Zoque

## Zuni

+ Possible inclusions if ECI/PMA are satellites of SEA and NWAFA is satellite of WAF and CAF satellite of either WAF or EAF

At least 46 more

{ } = may be in a Hotspot already

Gur

Kru

Kwa

Atlantic

Mande W

Mande E

{Saharan}

Edoid

{Idomoid}

{Nupoid}

{Songhay}

Dogon

Berber

Defoid

{Maban}

[E. Central Sudanic > Lendu]

[> Mangbutu-Efe

[> Mangbetu]

{> Moru Madi}

{W. C. S. > Kresh}

{Kordofanian > Rashad}

North Assam > Tani

Himalayish > Tibeto-Kanauri

Mikir

Unclassified TB (4) Hruso/Aka, Khamba, Sajalong,  
(Miji/Dammai), Zakhring

+((Bugun/Khoa); (Sulung/Puroik))

Nicobarese

Andamanese

Meitei

Tamangic

Naga-Kuki-Chin

Kiranti

Khasic

North Munda

South Munda

Dravidian

Nihali

Aslian

Malayic

Sabahan

Melanau-Kajang

North Sarawakan