

A. Forewing shape for the species-level distribution range of *Triatoma garciabesi*

r-PLS: 0.5641

Effect Size (Z): 5.45325

P-value: 1e-04

Explained variance (%)

1: 79.31            2: 14.77

Correlation with climatic variables:

	[,1]	[,2]
LAT	-0.31713953	-0.25563601
LONG	-0.43818466	0.01460054
ALT	0.25891960	-0.06767681
NDVI	-0.37156427	0.25721443
LAILV	-0.38446443	0.52424250
LAIHV	-0.17204345	-0.26051614
TM	-0.23975476	-0.18499861
TMMC	0.03552936	-0.11283499
TMMF	-0.32470418	-0.24576991
RH	-0.20635608	-0.29465979
PREC	-0.34031367	0.03199505
VELOC	-0.00200415	0.21458896
DV	-0.04824703	-0.52890757

B. Forewing shape for the Eastern lineage distribution range of *Triatoma garciabesi*

r-PLS: 0.8586

Effect Size (Z): 5.40299

P-value: 1e-04

Explained variance (%)

1: 87.54            2: 10.07

Correlation with climatic variables:

	[,1]	[,2]
LAT	0.3518089	0.14825257
LONG	0.1047692	-0.43286169
ALT	0.2334562	0.26886669
NDVI	0.2771007	0.30775310
LAILV	0.3268397	-0.17371735
LAIHV	-0.2329782	0.21180290
TM	0.3563018	0.21922326
TMMC	0.1130310	0.40088797
TMMF	0.2696443	-0.25803136
RH	-0.2998176	-0.21819205
PREC	0.1567188	-0.37567177
VELOC	0.3125735	-0.28621637
DV	-0.3850658	0.05104344

C. Forewing shape for the Western lineage distribution range of *Triatoma garciabesi*

r-PLS: 0.5608

Effect Size (Z): 4.80815

P-value: 1e-04

Explained variance (%)

1: 83.36            2: 8.11

Correlation with climatic variables:

	[,1]	[,2]
LAT	-0.39490869	-0.02887200
LONG	-0.37272697	-0.07582868

ALT	0.17114203	0.09694460
NDVI	-0.32733625	-0.12962303
LAILV	-0.13750648	-0.54415899
LAIHV	-0.27298171	0.24188237
TM	-0.29078738	-0.12101886
TMMMC	-0.10493887	-0.06484450
TMMMF	-0.40607134	0.08158302
RH	-0.22771938	-0.42669631
PREC	-0.25328655	0.15422463
VELOC	0.05362026	0.17179631
DV	-0.30968910	0.59306394

D. Membranous portion of the forewing shape for the species-level distribution range of *Triatoma garciabesi*

r-PLS: 0.4524

Effect Size (Z): 4.42055

P-value: 1e-04

Explained variance (%)

1: 78.86            2: 12.42

Correlation with climatic variables:

	[,1]	[,2]
LAT	-0.35773756	-0.20812029
LONG	-0.44545504	0.10418567
ALT	0.24202527	-0.16500431
NDVI	-0.33597259	0.30450928
LAILV	-0.25751803	0.58399257
LAIHV	-0.22468499	-0.14306999
TM	-0.31666130	-0.13127648
TMMMC	0.05631122	-0.01141123
TMMMF	-0.30128428	-0.19600396
RH	-0.32613751	-0.26106391
PREC	-0.25513916	0.08280510
VELOC	0.12715962	0.31256602
DV	-0.05909459	-0.48566736

E. Membranous portion of the forewing shape for the Eastern lineage distribution range of *Triatoma garciabesi*

-PLS: 0.6997

Effect Size (Z): 3.93118

P-value: 1e-04

#Varianza explicada (%)

1: 86.18            2: 12.55

#Relacion con variables climaticas

	[,1]	[,2]
LAT	0.39511548	0.01010391
LONG	-0.12044627	0.43954591
ALT	0.36890197	-0.20078201
NDVI	0.30031743	0.12606943
LAILV	0.18366050	0.38367161
LAIHV	-0.11241949	-0.22250061
TM	0.38458275	0.03872498
TMMMC	0.30553051	-0.32666411
TMMMF	0.19523430	0.14600059
RH	-0.37676477	0.10426480
PREC	-0.07345607	0.46685128
VELOC	0.14018428	0.39810199
DV	-0.33220411	-0.19221931

F. Membranous portion of the forewing shape for the Western lineage distribution range of *Triatoma garciabesi*

r-PLS: 0.4641

Effect Size (Z): 3.69842

P-value: 2e-04

#Varianza explicada (%)

1: 84.07            2: 10.02

#Relacion con variables climaticas

	[,1]	[,2]
LAT	-0.42082003	-0.075792435
LONG	-0.42303062	0.035209048
ALT	0.16426865	-0.271988886
NDVI	-0.34888913	-0.003048975
LAILV	-0.12023709	-0.282727801
LAIHV	-0.25020442	0.237420146
TM	-0.35700989	0.100966114
TMMMC	-0.03787961	0.413829094
TMMMF	-0.35349346	0.091308702
RH	-0.28682121	-0.295885612
PREC	-0.17328869	-0.102197943
VELOC	0.17318866	0.559176404
DV	-0.14849354	0.426928945

G. Stiff portion of the forewing shape for the species-level distribution range of *Triatoma garciabesi*

r-PLS: 0.3917

Effect Size (Z): 3.68776

P-value: 1e-04

Explained variance (%)

1: 61.92            2: 23.57

Correlation with climatic variables:

	[,1]	[,2]
LAT	0.38557746	0.15313937
LONG	0.13069103	0.45846248
ALT	0.18963781	-0.29012627
NDVI	-0.07667148	0.38235118
LAILV	-0.21304917	0.55989246
LAIHV	-0.15565037	0.07973633
TM	0.10783101	0.11636790
TMMMC	-0.37276509	-0.09361477
TMMMF	0.36496974	0.06343244
RH	0.14617873	0.13574267
PREC	0.36490575	0.33381002
VELOC	-0.44222661	0.11447885
DV	0.29819259	-0.21648986

H. Stiff portion of the forewing shape for the Eastern lineage distribution range of *Triatoma garciabesi*

r-PLS: 0.7462

Effect Size (Z): 4.16614

P-value: 1e-04

Explained variance (%)

1: 77.01            2: 21.22

Correlation with climatic variables:

	[,1]	[,2]
LAT	-0.37779961	-0.104620390
LONG	0.20437058	-0.398713865
ALT	-0.37527343	0.075116961
NDVI	-0.36973260	0.004864704
LAILV	-0.14061905	-0.376086276
LAIHV	0.04901499	0.350722165
TM	-0.38941364	-0.065341573

TMMC -0.35637037 0.238395575  
 TMMF -0.07843915 -0.312635217  
 RH 0.36386044 -0.001300169  
 PREC 0.14824810 -0.392327893  
 VELOC -0.05653171 -0.420939742  
 DV 0.27097659 0.264599315

#### I. Stiff portion of the forewing shape for the Western lineage distribution range of *Triatoma garciabesi*

r-PLS: 0.4314

Effect Size (Z): 3.77169

P-value: 1e-04

Explained variance (%)

1: 78.64 2: 10.60

Correlation with climatic variables:

	[,1]	[,2]
LAT	0.41303431	0.23839744
LONG	0.14025924	0.30716746
ALT	0.20527472	-0.26971681
NDVI	0.01694002	0.17928965
LAILV	-0.29413291	0.08319285
LAIHV	-0.14595679	0.25312469
TM	0.13400813	0.31160378
TMMC	-0.32781474	0.41708889
TMMF	0.35774249	0.28993029
RH	0.05809327	0.11890181
PREC	0.36365930	0.02316621
VELOC	-0.43999323	0.37307489
DV	0.27725520	0.40490850

#### J. Head shape for the species-level distribution range of *Triatoma garciabesi*

r-PLS: 0.3986

Effect Size (Z): 3.39862

P-value: 2e-04

Explained variance (%)

1: 77.04 2: 12.90

Correlation with climatic variables:

	[,1]	[,2]
LAT	0.49723395	0.13181185
LONG	0.34699252	-0.26060171
ALT	-0.14492224	0.01036216
NDVI	0.32311582	-0.11355740
LAILV	0.19912495	-0.30968691
LAIHV	0.03465868	-0.36696111
TM	0.39724291	0.31156155
TMMC	0.09194181	0.51866623
TMMF	0.45653979	0.20051279
RH	0.12579041	-0.23007542
PREC	0.22272496	-0.43626744
VELOC	-0.07920386	0.12616903
DV	0.14039105	0.07529972

#### L. Head shape for the Eastern lineage distribution range of *Triatoma garciabesi*

r-PLS: 0.6079

Effect Size (Z): 2.78493

P-value: 0.0022

Explained variance (%)

1: 75.45            2: 20.98

Correlation with climatic variables:

	[,1]	[,2]
LAT	0.3595772	-0.17873194
LONG	0.1055637	0.42189852
ALT	0.2311967	-0.30689696
NDVI	0.2691114	-0.27519465
LAILV	0.3427884	0.17176055
LAIHV	-0.2344261	-0.27392929
TM	0.3445622	-0.18749612
TMMMC	0.1070697	-0.40559014
TMMMF	0.2722926	0.19653029
RH	-0.2818184	0.20800622
PREC	0.1441405	0.39184285
VELOC	0.3174190	0.28292548
DV	-0.3948987	-0.02152203

M. Head shape for the Western lineage distribution range of *Triatoma garciabesi*

r-PLS: 0.4081

Effect Size (Z): 2.64515

P-value: 0.0033

Explained variance (%)

1: 84.97            2: 6.32

Correlation with climatic variables:

	[,1]	[,2]
LAT	0.46221986	-0.05836601
LONG	0.39667652	0.10413063
ALT	-0.16001410	-0.39835128
NDVI	0.23873623	0.09626487
LAILV	0.07662046	-0.05060540
LAIHV	0.07077380	-0.26069734
TM	0.38823490	0.33627252
TMMMC	0.11193216	0.42905721
TMMMF	0.44656687	-0.07161113
RH	0.24127100	-0.05472532
PREC	0.18758841	-0.51304438
VELOC	-0.09508801	0.04576538
DV	0.26533275	-0.42032633