Supplementary Table 1: Description of the main features of the samples analyzed in this study.

Vertebrates	0.831
	0.831
Callorhinchus milii Chondrichthyes 11 $1069$ $0.970$ $8.0$ $0.491$ $1.47$ %	0.001
Gallus gallus Aves 217 9591 0.986 8.4 0.854 1.59 %	0.958
Crocodylus porosus	0.908
Monodelphis domestica Mammalia $269$ $11320$ $0.985$ $8.5$ $0.915$ $1.91$ %	0.957
Heterocephalus glaber Mammalia 54 2000 0.991 8.6 0.803 2.69 %	0.914
Macaca mulatta Mammalia 177 5810 0.993 8.6 0.908 $2.84\%$	0.948
Oryctolagus cuniculus Mammalia 338 15837 0.981 8.4 0.950 1.97 %	0.969
Rattus norvegicus Mammalia 362 16643 0.968 8.5 0.953 1.89 %	0.965
Mus musculus Mammalia $317$ $12261$ $0.974$ $8.4$ $0.937$ $1.87\%$	0.958
Bos taurus Mammalia 26 691 0.987 8.5 0.511 1.63 $\%$	0.856
$ Loxodonta africana \qquad Mammalia \qquad 23 \qquad \qquad 3616 \qquad \qquad 0.961 \qquad \qquad 8.3 \qquad \qquad 0.896 \qquad \qquad 3.55 \ \% $	0.938
Sus scrofa Mammalia 55 896 0.980 8.5 0.644 1.95 $\%$	0.886
Canis lupus Mammalia 5 350 0.930 8.2 0.436 2.18 $\%$	0.764
Homo sapiens Mammalia $313$ $10269$ $0.987$ $8.4$ $0.957$ $3.38$ %	0.949
Equus caballus Mammalia 19 995 $0.987$ $8.5$ $0.658$ $2.16$ %	0.884
Insects	
Bombyx mori Lepidoptera 14 459 0.936 5.3 0.393 1.12 %	0.835
Athalia rosae Hymenoptera 6 359 0.985 4.8 0.348 1.6 %	0.782
Cephus cinctus Hymenoptera 17 2566 0.996 4.7 0.744 2.4 %	0.907
Orussus abietinus Hymenoptera 2 198 0.971 4.7 0.370 2.03 %	0.763
Nasonia vitripennis Hymenoptera 114 4827 0.973 4.5 0.648 1.21 %	0.913
Trichogramma pretiosum Hymenoptera 4 $361$ $0.984$ $4.4$ $0.268$ $0.98\%$	0.782
Harpegnathos saltator Hymenoptera 166 1923 0.993 4.7 0.565 2.02 %	0.886
Linepithema humile Hymenoptera $23$ $1478$ $0.977$ $4.8$ $0.570$ $1.45$ %	0.882
Camponotus floridanus Hymenoptera $37$ $446$ $0.989$ $4.7$ $0.358$ $1.52$ %	0.761
Pogonomyrmex barbatus Hymenoptera $39$ $1386$ $0.949$ $4.5$ $0.579$ $1.91\%$	0.866
Polistes canadensis Hymenoptera $14$ $444$ $0.978$ $4.8$ $0.424$ $1.88$ %	0.834
Polistes dominula Hymenoptera $12$ $221$ $0.886$ $4.3$ $0.180$ $1.63$ $\%$	0.624
Solenopsis invicta Hymenoptera $23$ $431$ $0.973$ $4.6$ $0.430$ $1.71$ %	0.807
Acromyrmex echinatior Hymenoptera $42$ $1470$ $0.983$ $4.7$ $0.529$ $2.15$ %	0.835
Megachile rotundata Hymenoptera $108$ $3400$ $0.993$ $4.8$ $0.898$ $3.81$ %	0.927
Apis mellifera Hymenoptera $40$ $1777$ $0.991$ $4.9$ $0.673$ $2.3$ %	0.892
Apis florea Hymenoptera 4 503 $0.888$ 4.4 $0.318$ $1.85$ %	0.711
Apis cerana Hymenoptera 12 1401 0.985 4.6 0.578 2.36 $\%$	0.839
Bombus terrestris Hymenoptera $33$ $2648$ $0.964$ $4.7$ $0.763$ $2.33$ %	0.922
Acyrthosiphon pisum Hemiptera $35$ $3036$ $0.985$ $6.0$ $0.709$ $1.09$ %	0.933
Cimex lectularius Hemiptera $10$ $469$ $0.991$ $6.3$ $0.431$ $1.61$ $\%$	0.838
Halyomorpha halys Hemiptera $6$ $1458$ $0.993$ $6.5$ $0.591$ $1.73$ $\%$	0.885
Aedes aegypti Diptera 27 2418 $0.967$ $2.6$ $0.514$ $1.35$ %	0.870
Drosophila grimshawi Diptera $30$ $253$ $0.928$ $2.7$ $0.168$ $0.8$ $\%$	0.726
Drosophila pseudoobscura Diptera $32$ $3584$ $0.971$ $2.6$ $0.433$ $1.32$ %	0.871
Drosophila melanogaster Diptera $129$ $4530$ $0.990$ $2.7$ $0.551$ $1.22\%$	0.909
Drosophila suzukii Diptera 23 1913 0.938 2.6 0.287 $1.17\%$	0.810
Ceratitis capitata Diptera $29$ $1171$ $0.983$ $3.3$ $0.418$ $1.45$ %	0.860
Lucilia cuprina Diptera 23 2446 $0.937$ $2.8$ $0.268$ $0.85$ %	0.823
Musca domestica Diptera 12 1052 0.943 2.9 0.254 0.98 %	0.795
Onthophagus taurus Coleoptera $53$ $647$ $0.971$ $3.2$ $0.377$ $1.34$ $\%$	0.810
Tribolium castaneum Coleoptera $14$ $2620$ $0.968$ $3.6$ $0.556$ $1.15 \%$	0.881
Dendroctonus ponderosae Coleoptera 30 2280 0.977 4.9 0.505 1.26 %	0.882
Anoplophora glabripennis Coleoptera $20$ $320$ $0.948$ $4.1$ $0.299$ $1.13\%$	0.781
Leptinotarsa decemlineata Coleoptera 21 2050 0.929 3.8 0.512 1.21 %	0.883
Blattella germanica Blattodea 30 939 0.907 5.4 0.423 1.26 %	0.827
Cryptotermes secundus Blattodea 11 482 $0.988$ $6.4$ $0.573$ $2.32$ %	0.832
Zootermopsis nevadensis Blattodea 53 3985 0.983 6.4 0.802 2.36 %	0.927

 $<sup>^{\</sup>rm a}$  Median  $per\text{-}{\rm base}$  read coverage computed on BUSCO gene exons

 $<sup>^{\</sup>rm b}$  Fraction of analyzable introns (i.e. with N  $\geq$  10) among BUSCO genes

<sup>&</sup>lt;sup>c</sup> Proportion of major introns for which alternative splicing has been detected (*i.e.* with N2 > 0) among BUSCO genes <sup>d</sup> Fraction of rare spliced variants introns (*i.e.* with MIRA  $\leq$  5%) among all protein-coding genes