APPENDIX C

Phylogenetic reconstruction using 100 bp and 450 bp segments

a) 100 bp segments

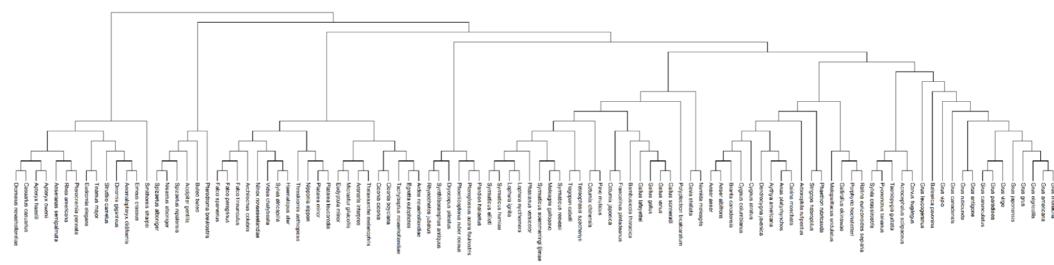


Figure C.1: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 1-100

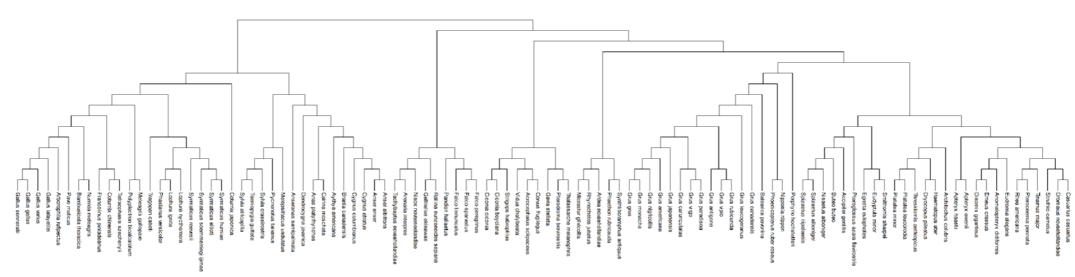


Figure C.2: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 101-200

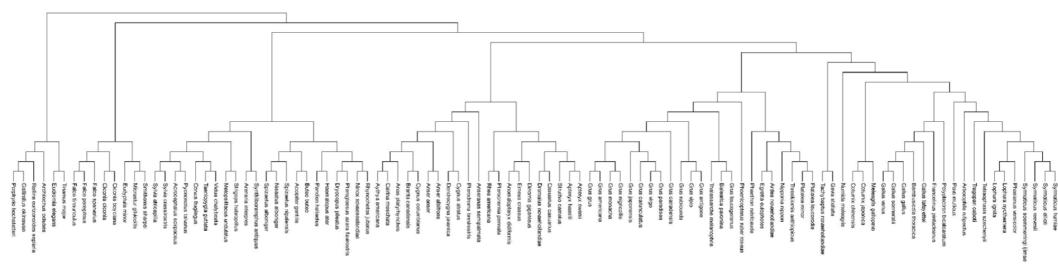


Figure C.3: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 201-300

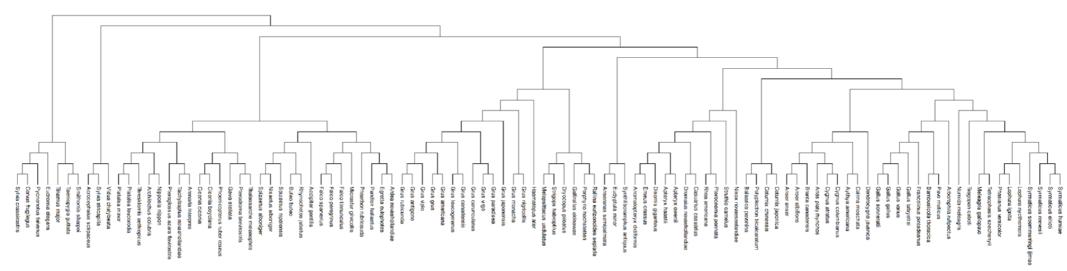


Figure C.4: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 301-400

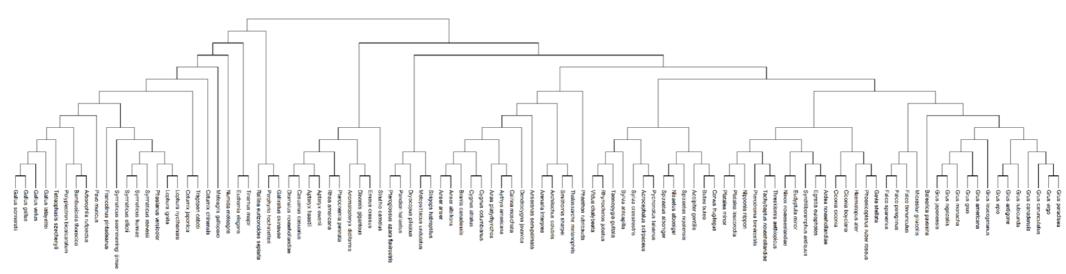


Figure C.5: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 401-500

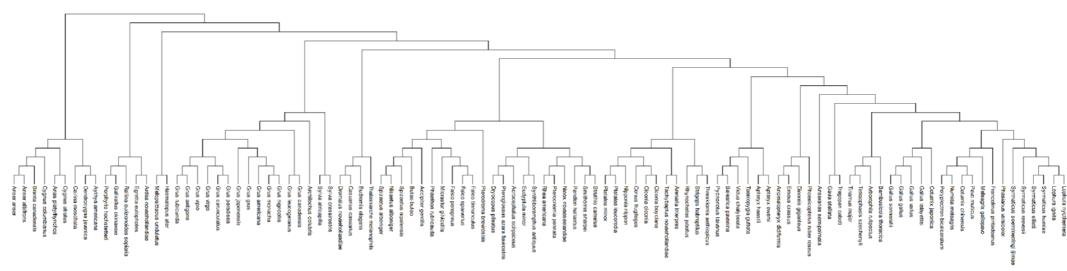


Figure C.6: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 501-600

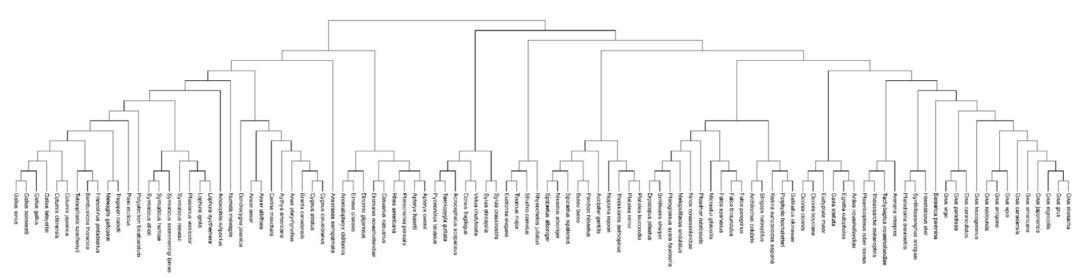


Figure C.7: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 601-700

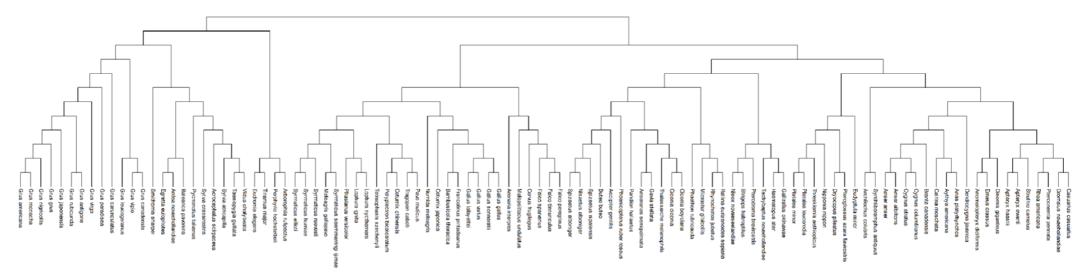


Figure C.8: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 701-800

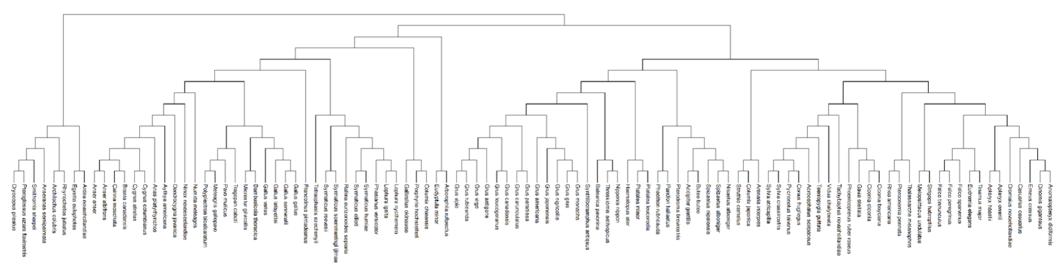


Figure C.9: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 801-900

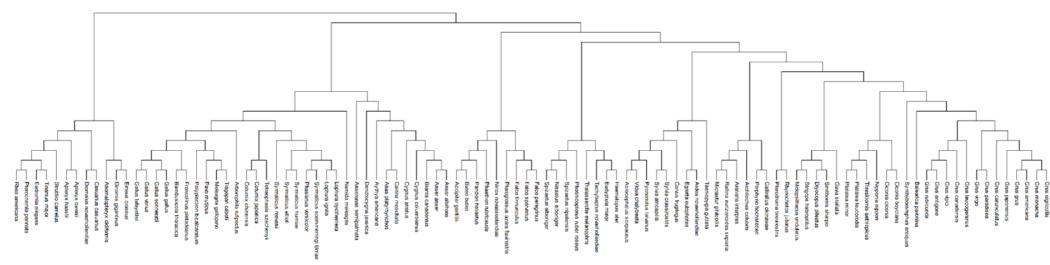


Figure C.10: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 901-1000

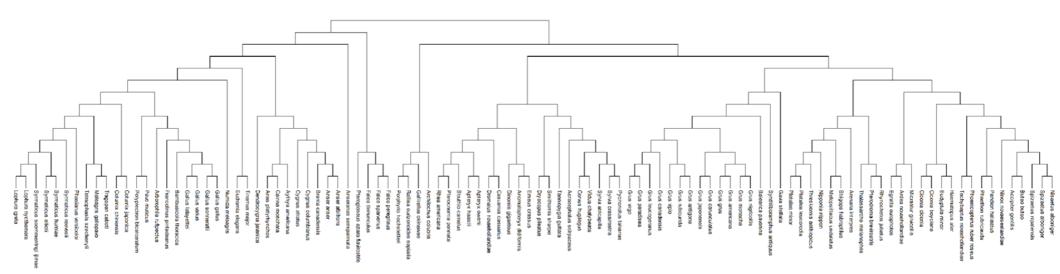


Figure C.11: Phylogenetic tree reconstruction of the 100 bp segment from the ND2 gene, at base positions 1001-1041

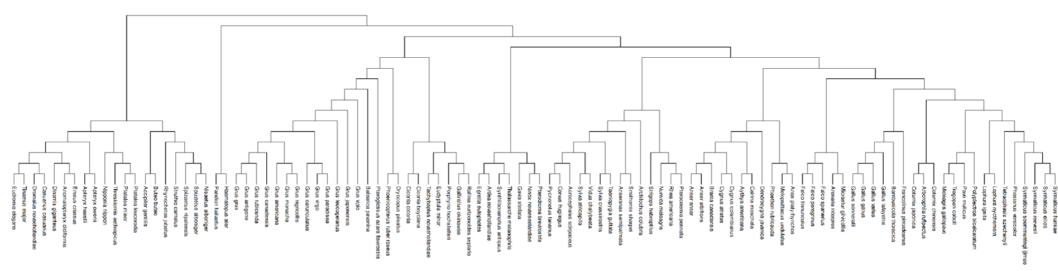


Figure C.12: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 1-100

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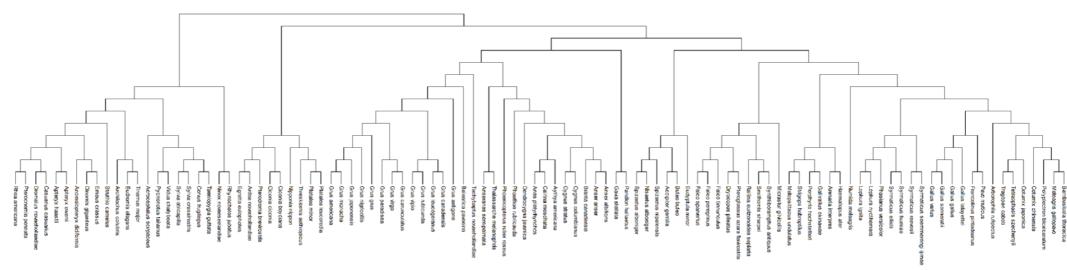


Figure C.13: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 101-200

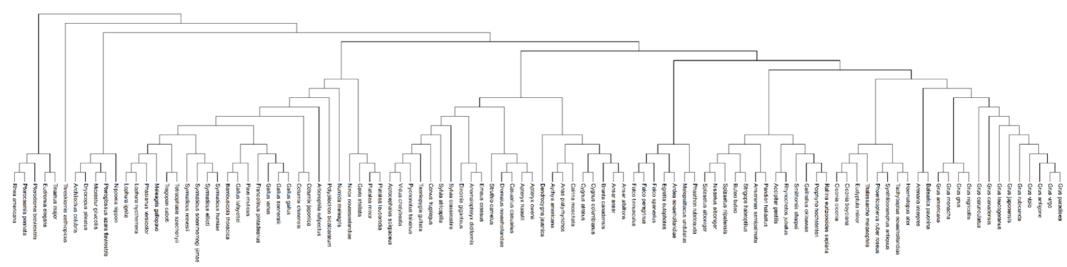


Figure C.14: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 201-300

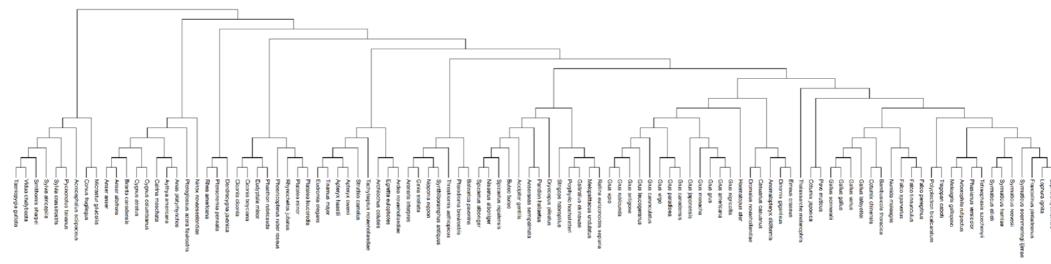


Figure C.15: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 301-400

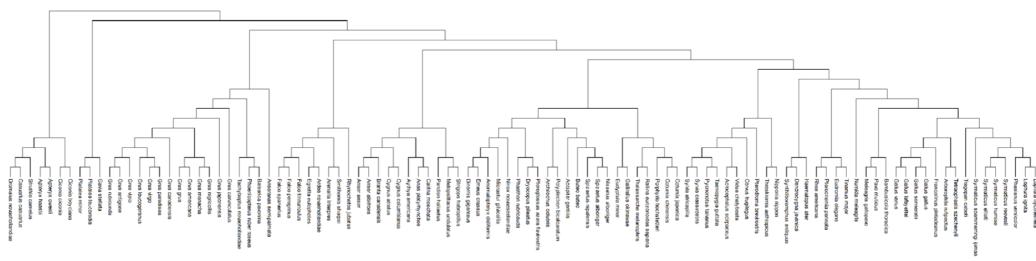


Figure C.16: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 401-500

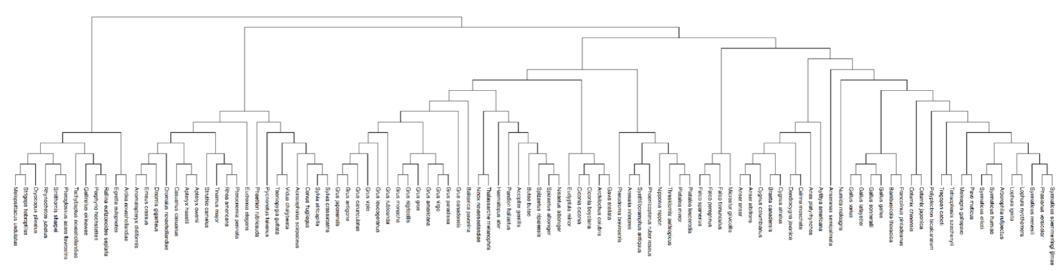


Figure C.17: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 501-600

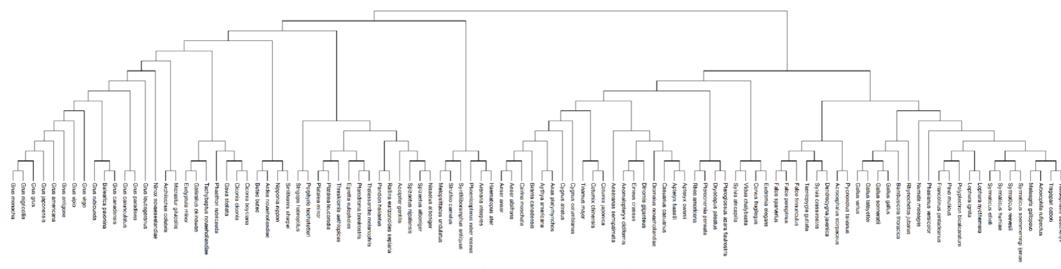


Figure C.18: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 601-700

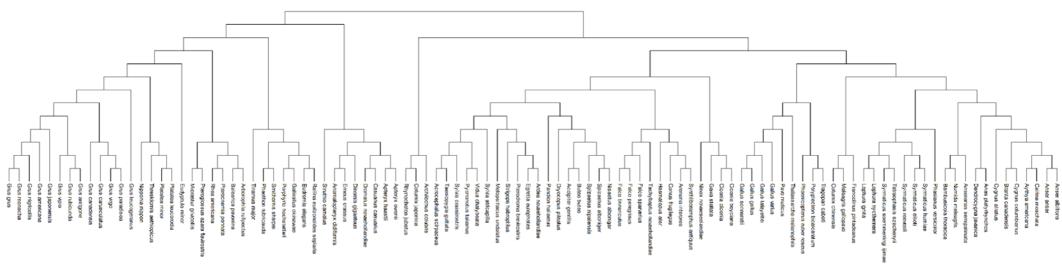


Figure C.19: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 701-800

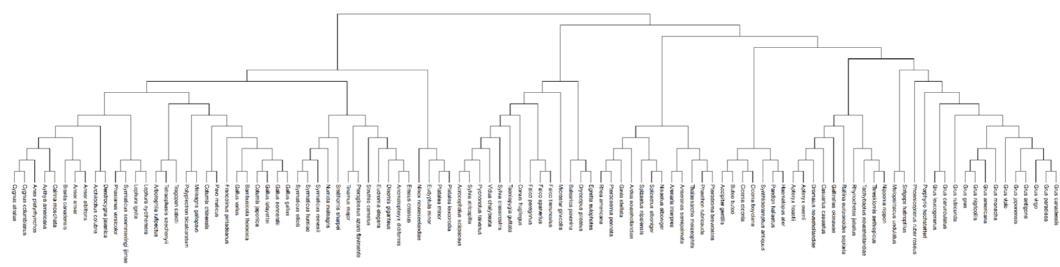


Figure C.20: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 801-900

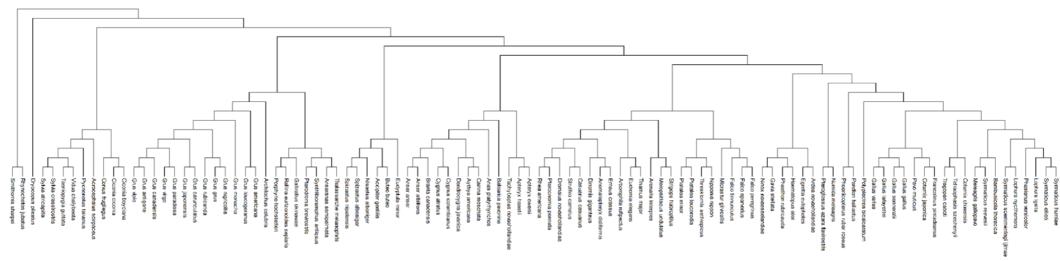


Figure C.21: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 901-1000

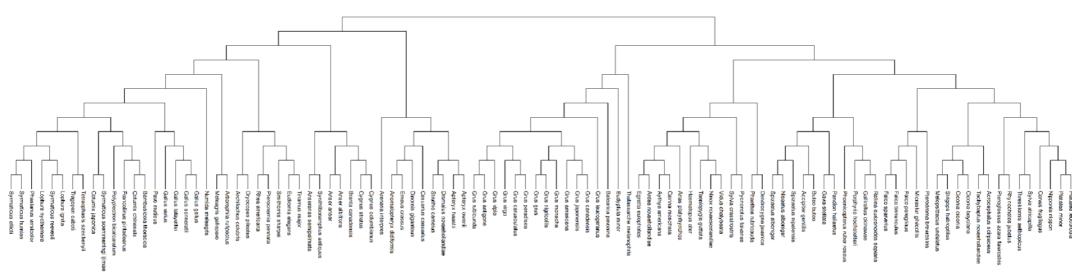


Figure C.22: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 1001-1100

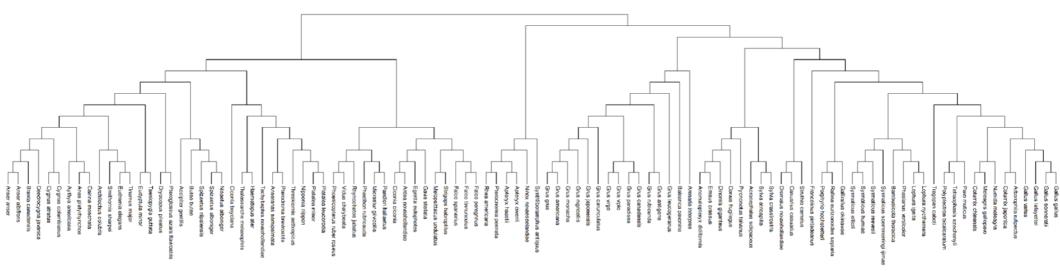


Figure C.23: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 1101-1200

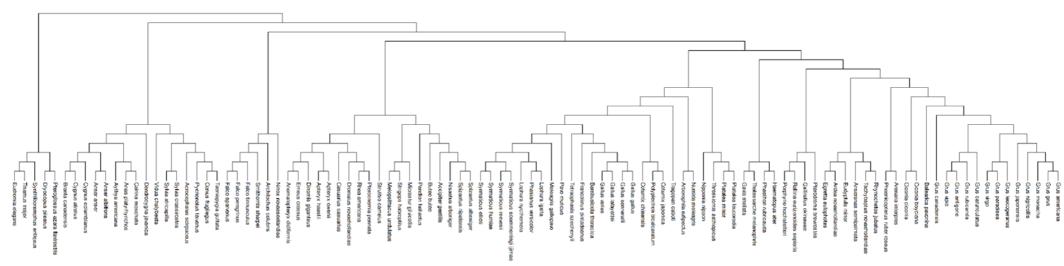


Figure C.24: Phylogenetic tree reconstruction of the 100 bp segment from the ND4 gene, at base positions 1201-1375

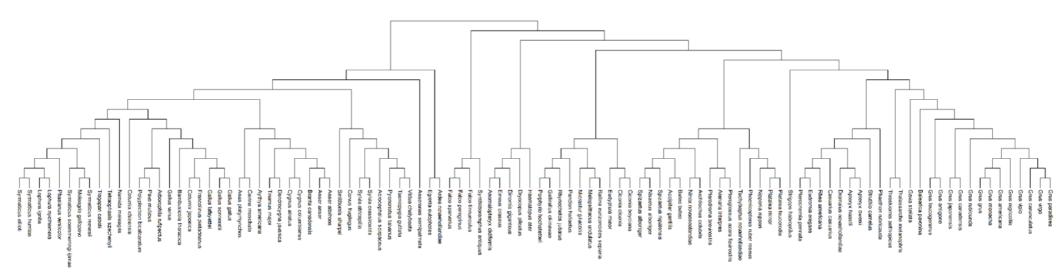


Figure C.25: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1-100

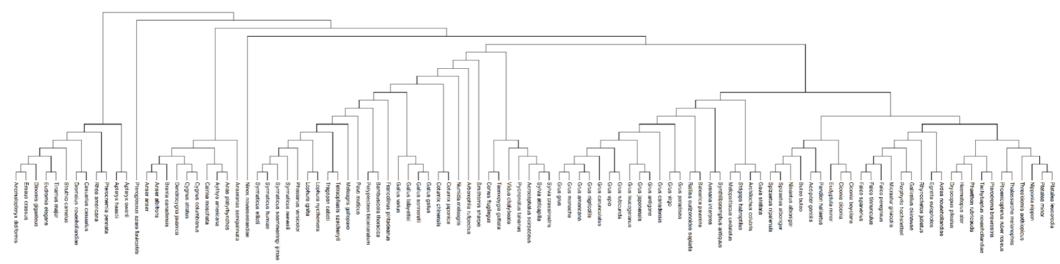


Figure C.26: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 101-200

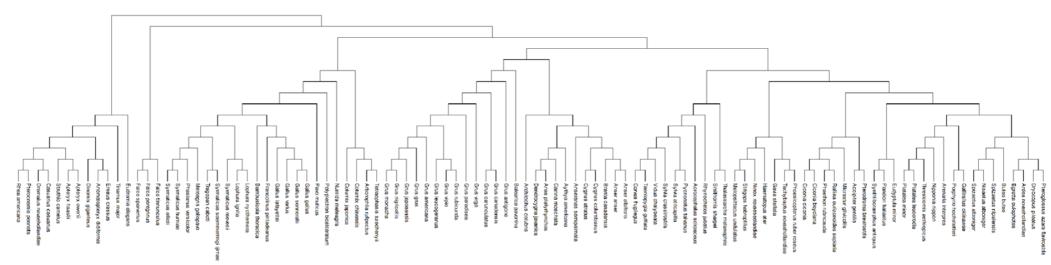


Figure C.27: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 201-300

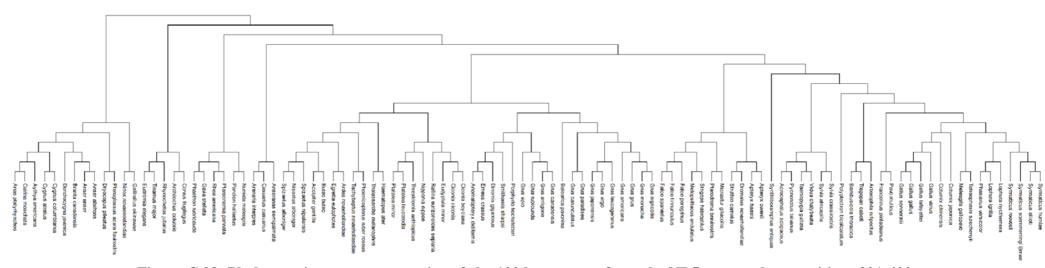


Figure C.28: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 301-400

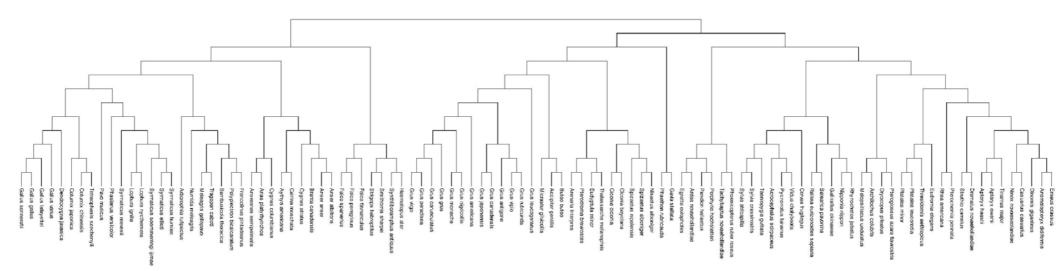


Figure C.29: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 401-500

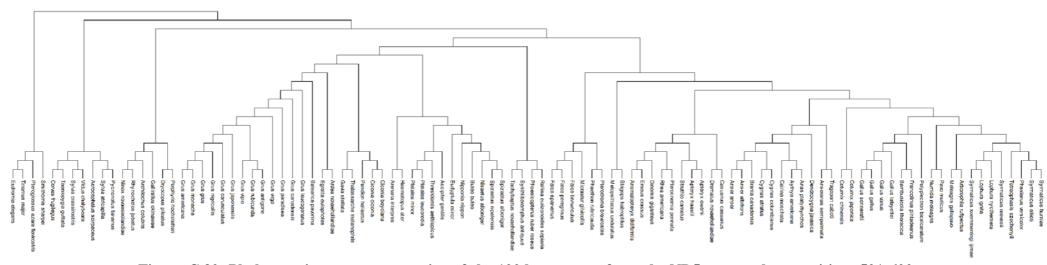


Figure C.30: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 501-600

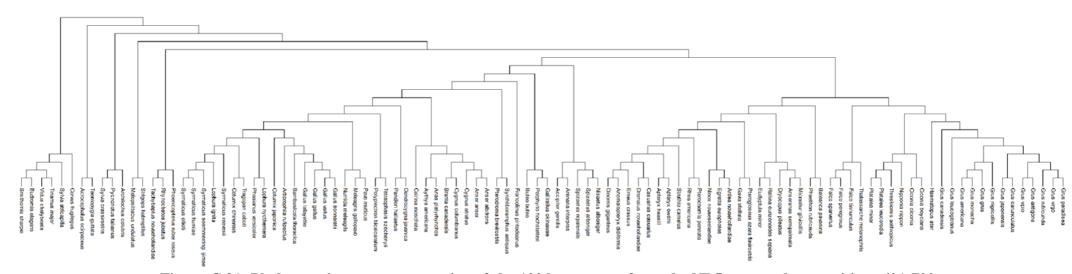


Figure C.31: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 601-700

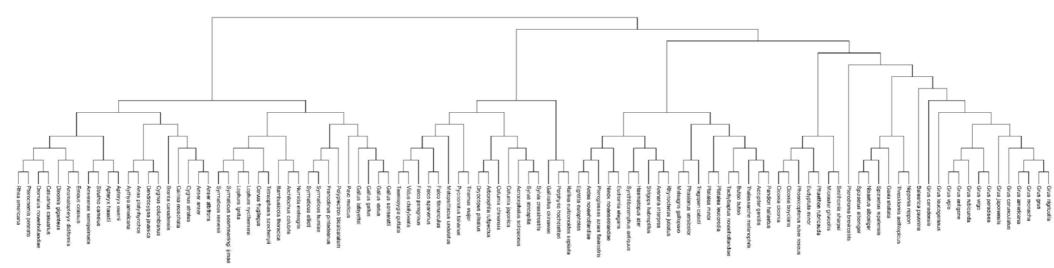


Figure C.32: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 701-800

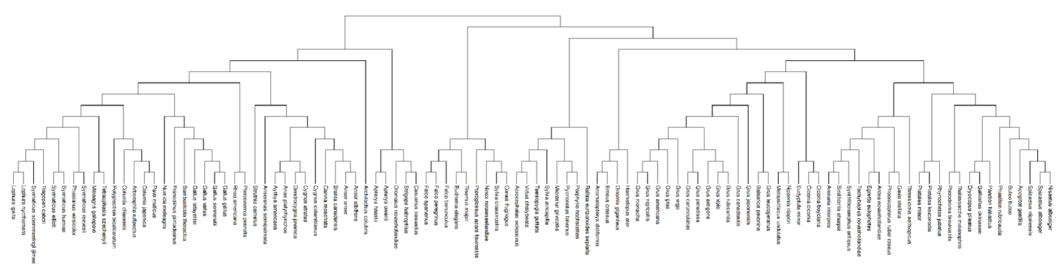


Figure C.33: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 801-900

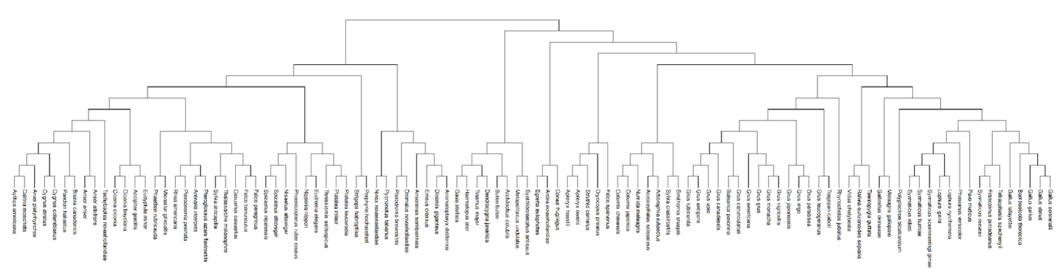


Figure C.34: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 901-1000

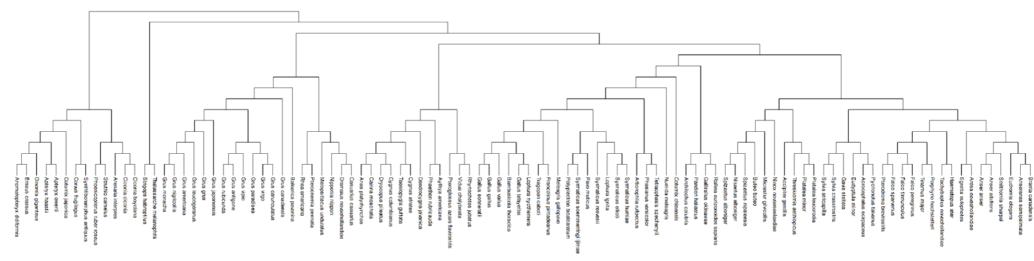


Figure C.35: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1001-1100

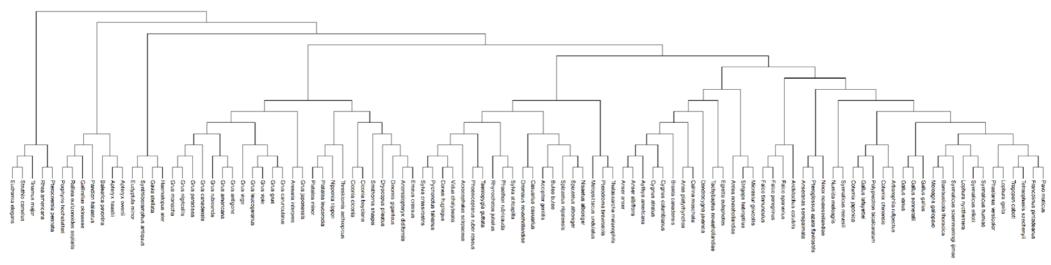


Figure C.36: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1101-1200

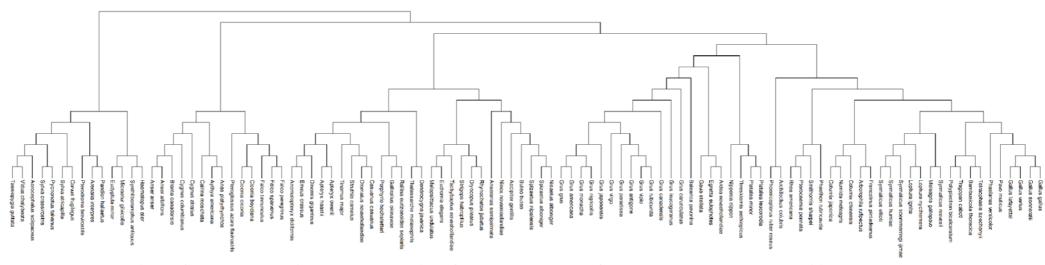


Figure C.37: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1201-1300

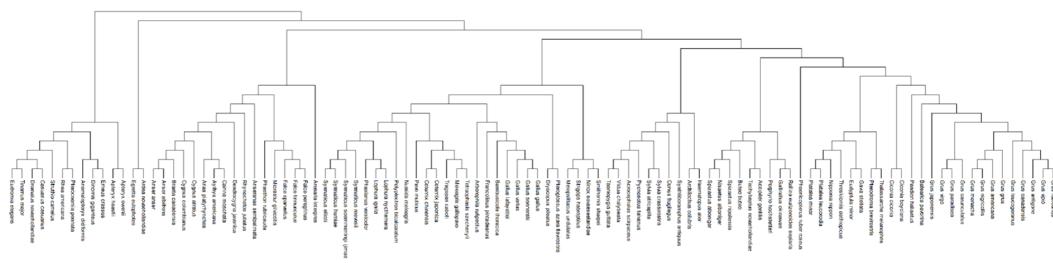


Figure C.38: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1301-1400

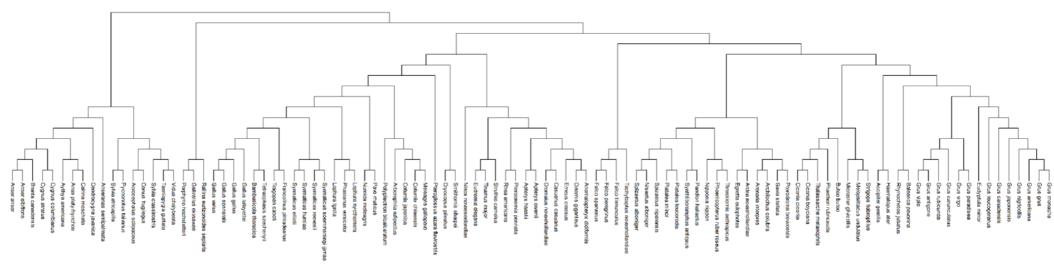


Figure C.39: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1401-1500

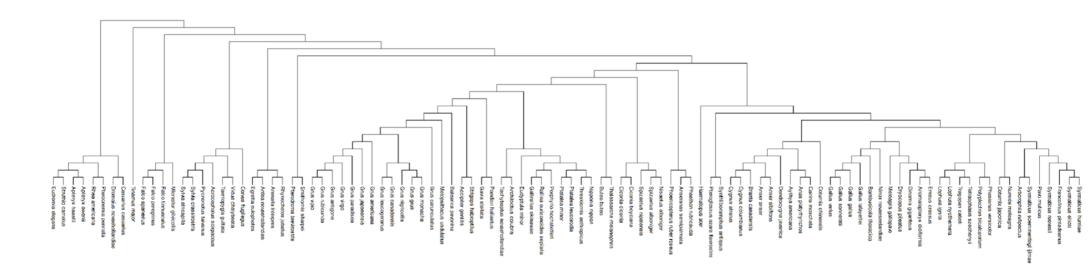


Figure C.40: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1501-1600

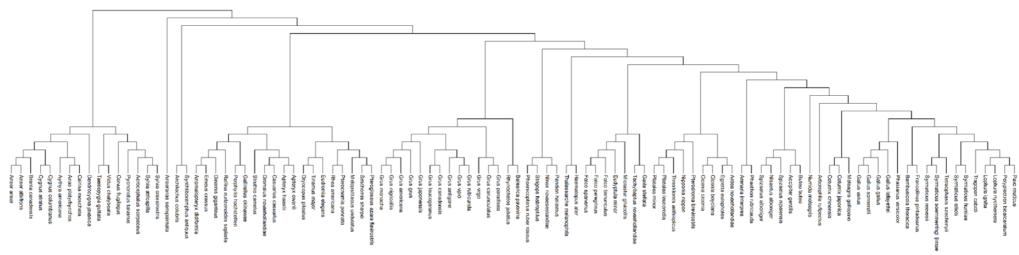


Figure C.41: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1601-1700

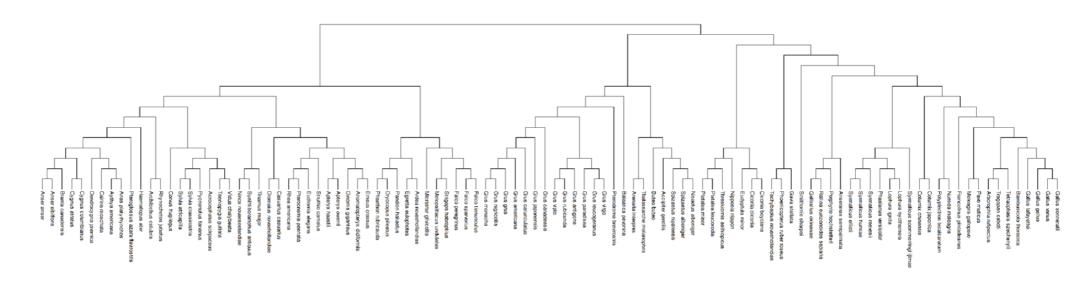


Figure C.42: Phylogenetic tree reconstruction of the 100 bp segment from the ND5 gene, at base positions 1701-1800

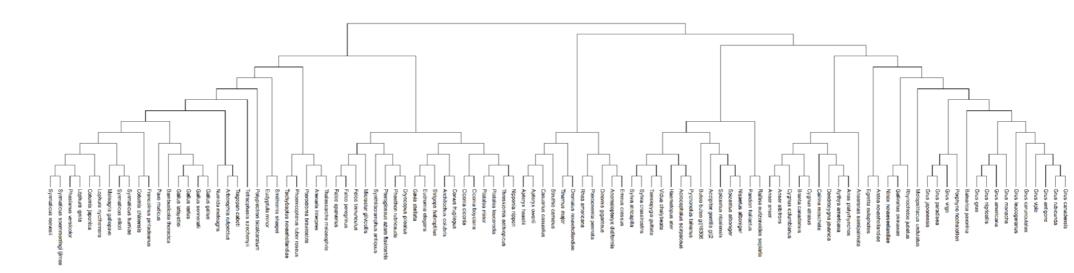


Figure C.43: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 1-100

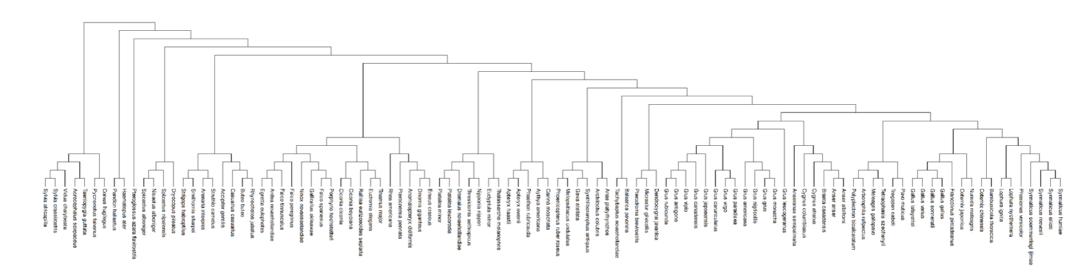


Figure C.44: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 101-200

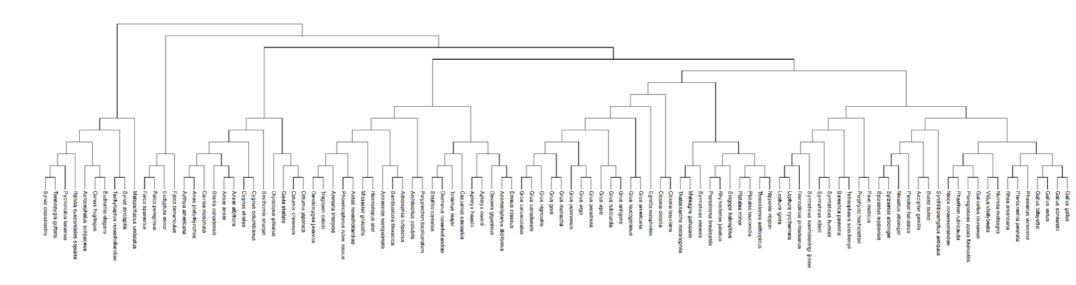


Figure C.45: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 201-300

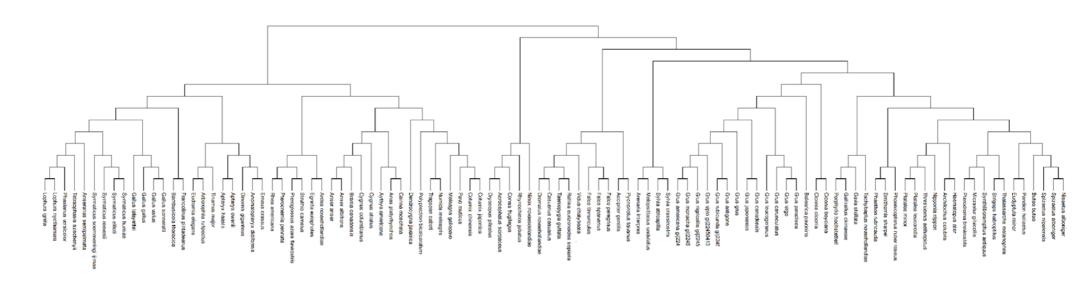


Figure C.46: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 301-400

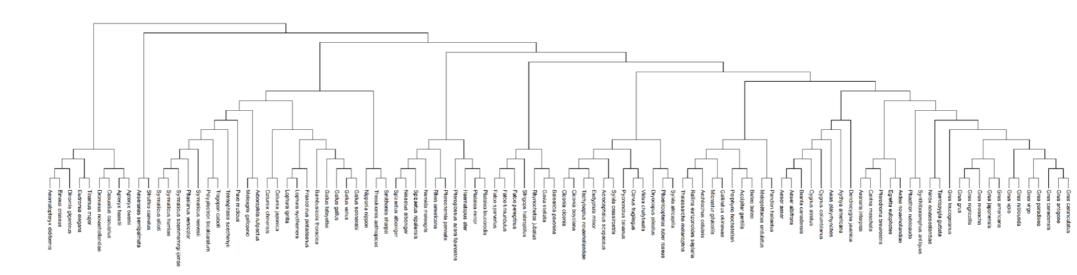


Figure C.47: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 401-500

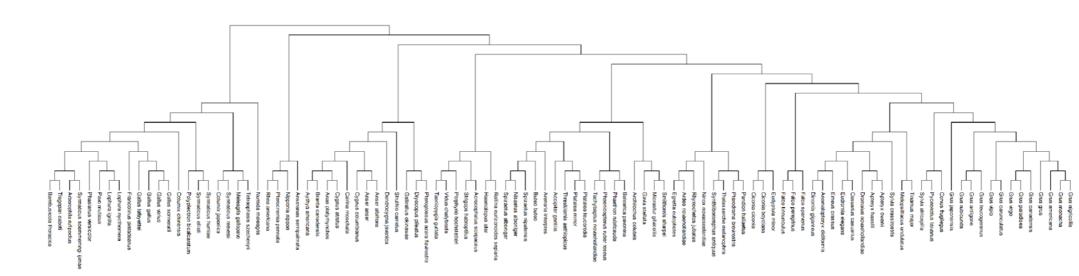


Figure C.48: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 501-600

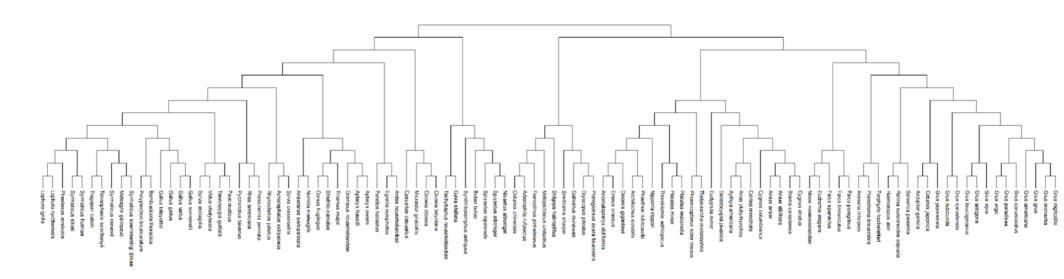


Figure C.49: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 601-700

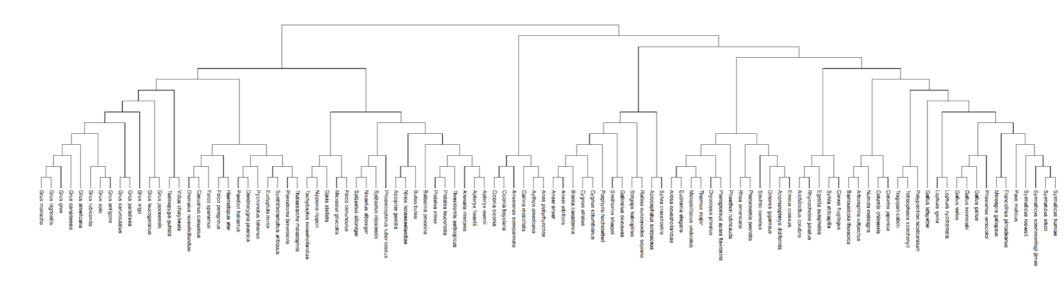
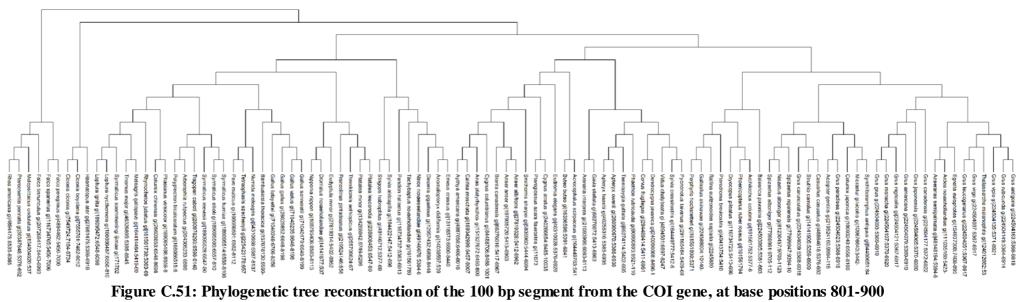
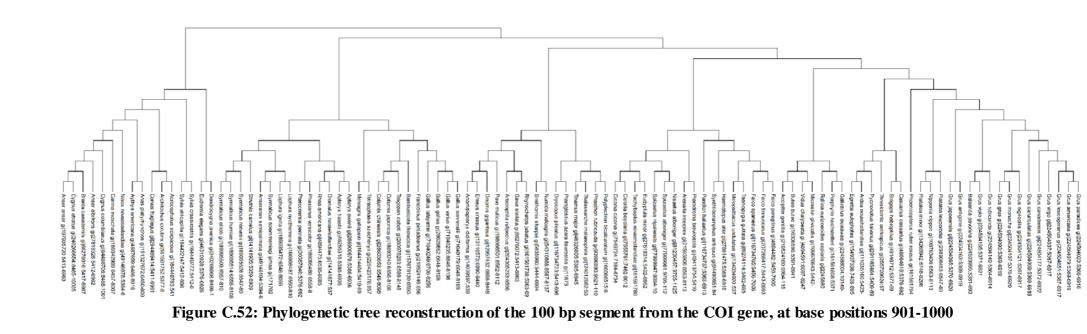
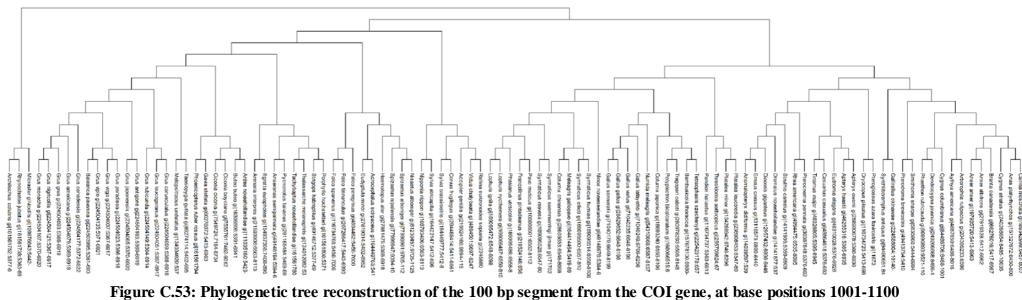


Figure C.50: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 701-800







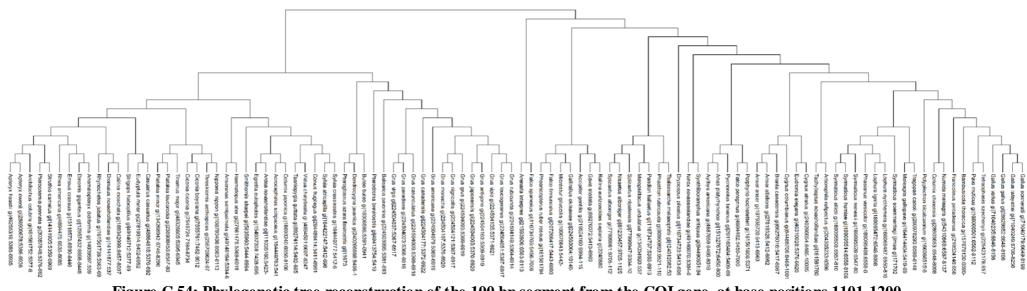
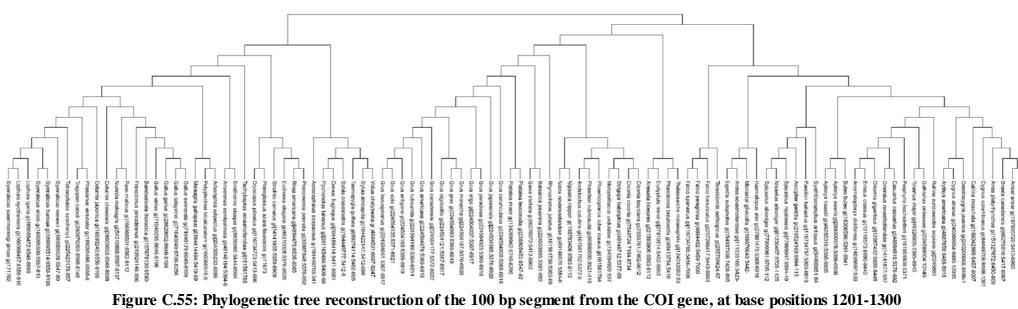
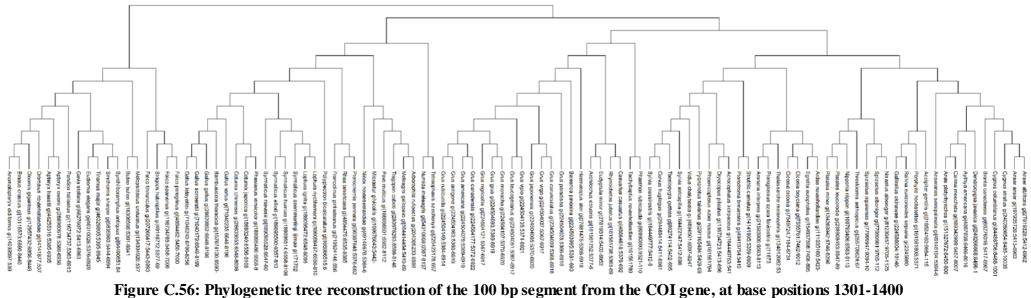


Figure C.54: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 1101-1200





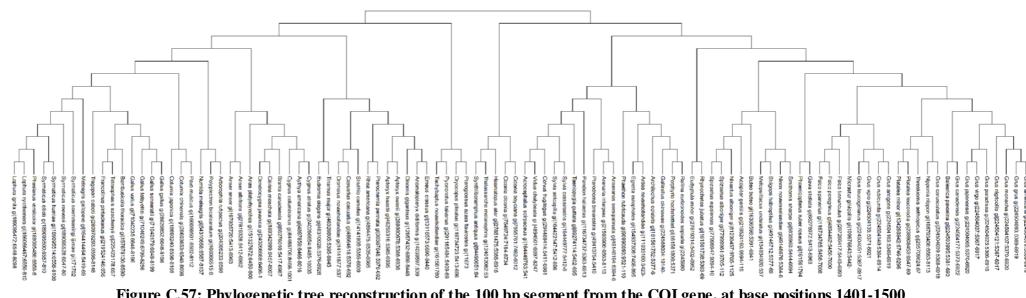


Figure C.57: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 1401-1500

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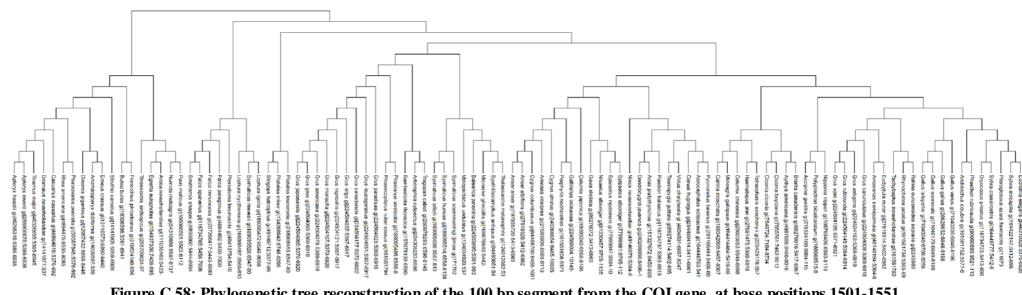


Figure C.58: Phylogenetic tree reconstruction of the 100 bp segment from the COI gene, at base positions 1501-1551

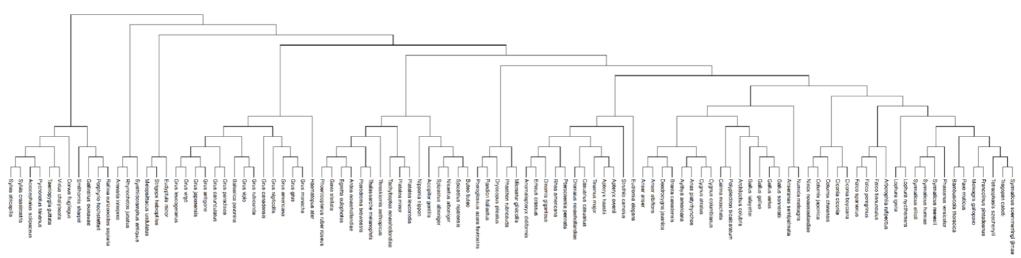


Figure C.59: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 1-100

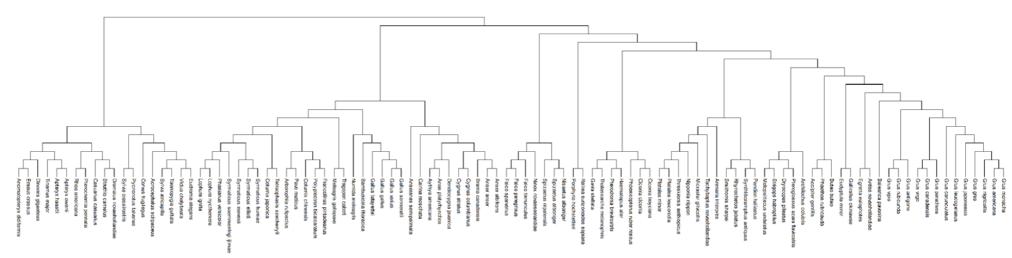


Figure C.60: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 101-200

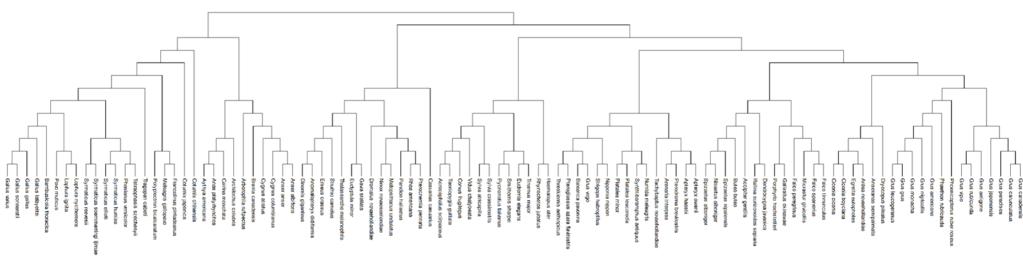


Figure C.61: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 201-300

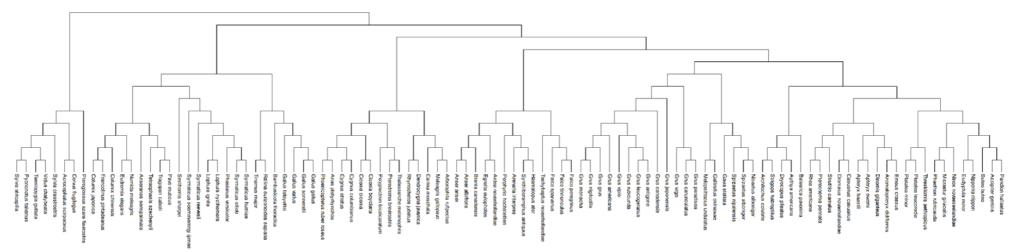


Figure C.62: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 301-400

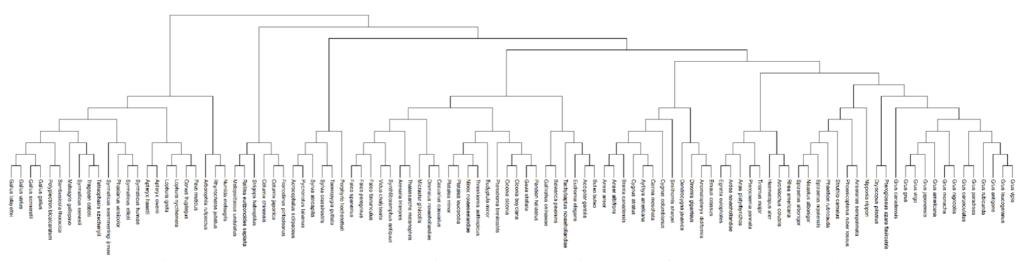


Figure C.63: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 401-500

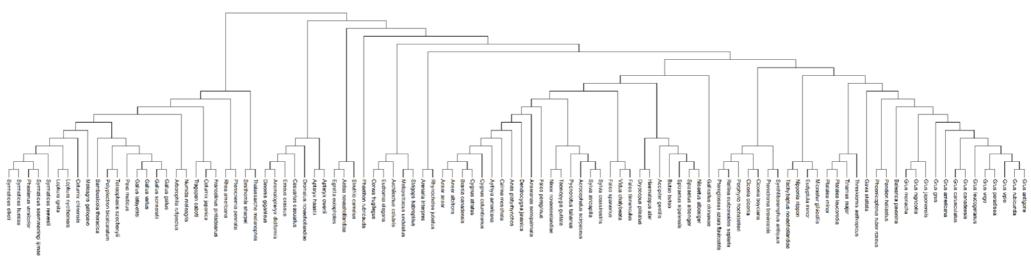


Figure C.64: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 501-600

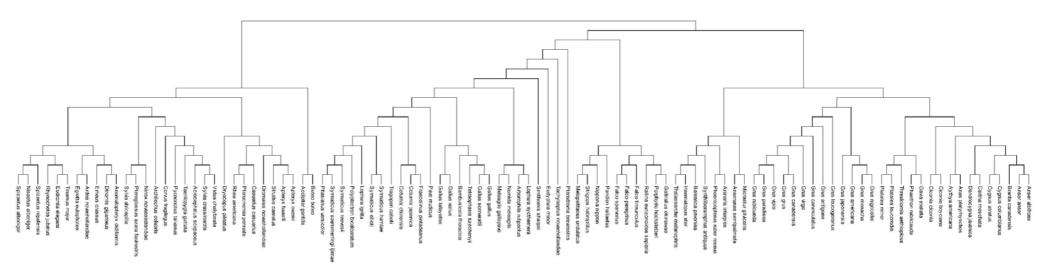


Figure C.65: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 601-700

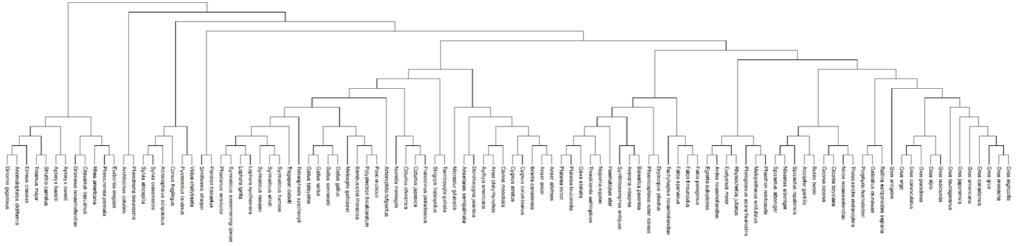


Figure C.66: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 701-800

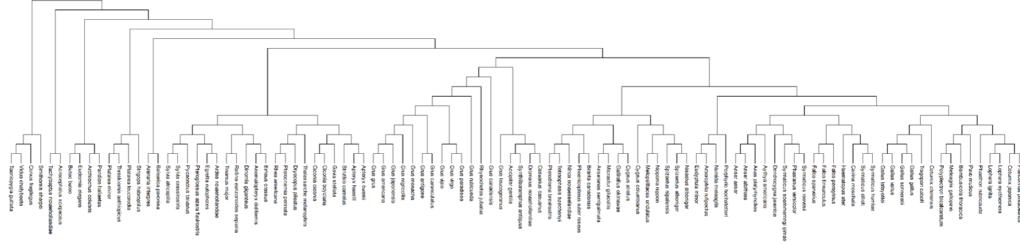


Figure C.67: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 801-900

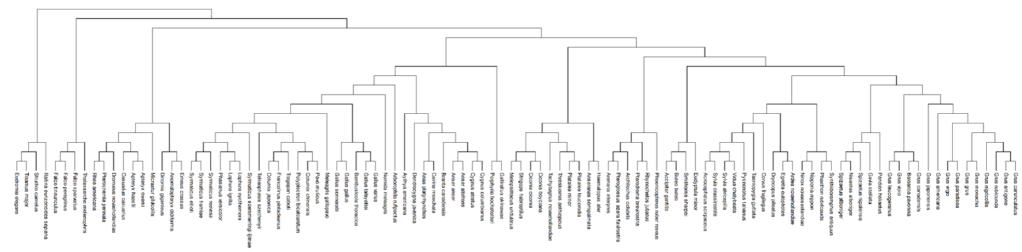


Figure C.68: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 901-1000

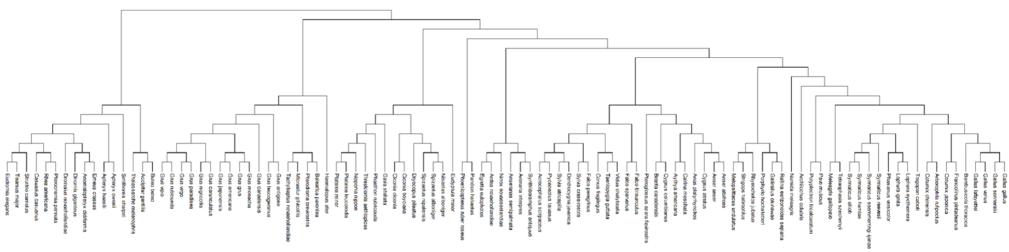


Figure C.69: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 1001-1100

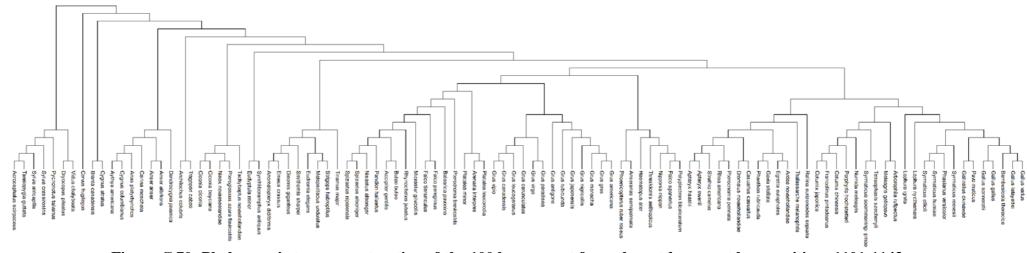


Figure C.70: Phylogenetic tree reconstruction of the 100 bp segment from the cyt b gene, at base positions 1101-1143

b) 450 bp segments

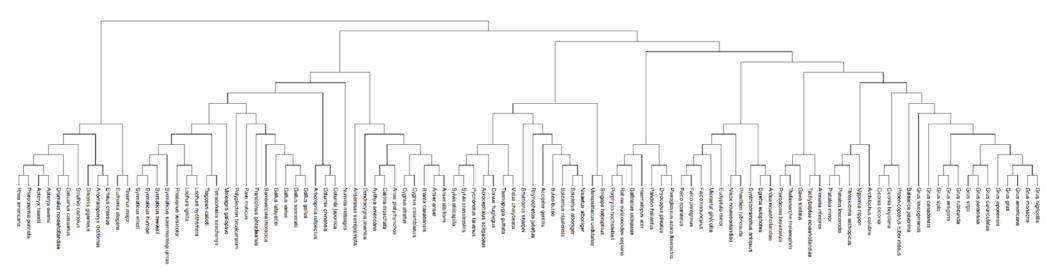


Figure C.71: Phylogenetic tree reconstruction of the 450 bp segment from the ND2 gene, at base positions 1-450

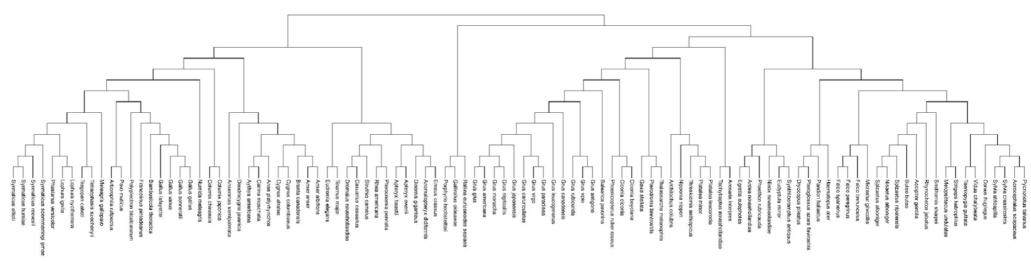


Figure C.72: Phylogenetic tree reconstruction of the 450 bp segment from the ND2 gene, at base positions 101-550

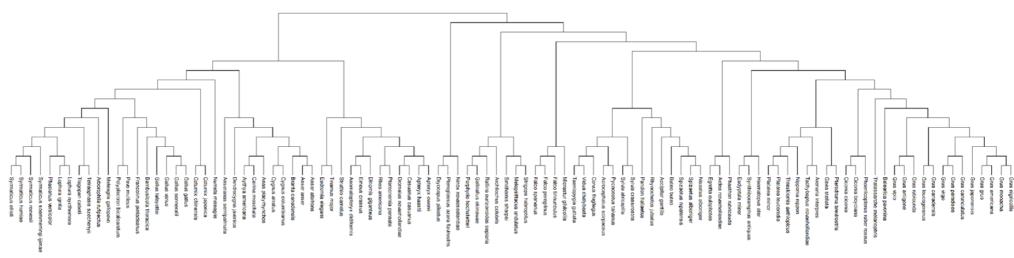


Figure C.73: Phylogenetic tree reconstruction of the 450 bp segment from the ND2 gene, at base positions 201-650

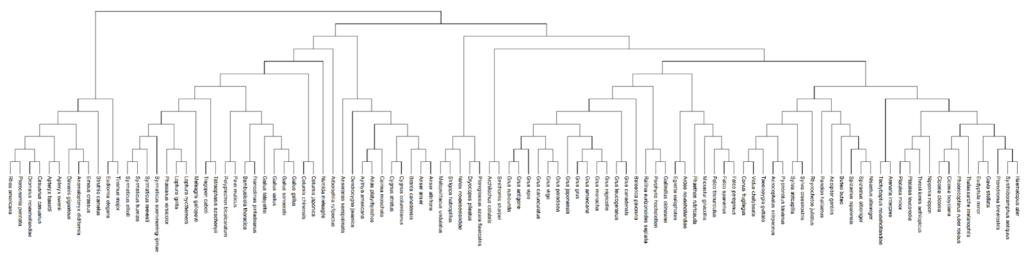


Figure C.74: Phylogenetic tree reconstruction of the 450 bp segment from the ND2 gene, at base positions 301-750

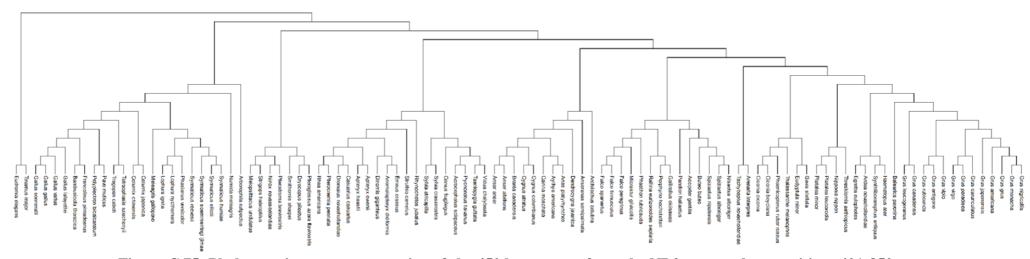


Figure C.75: Phylogenetic tree reconstruction of the 450 bp segment from the ND2 gene, at base positions 401-850

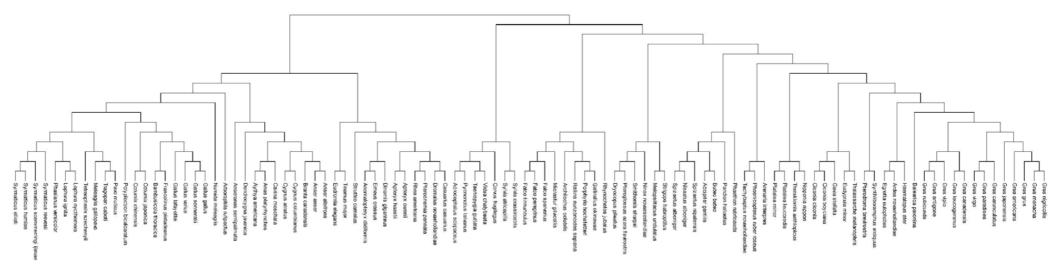


Figure C.76: Phylogenetic tree reconstruction of the 450 bp segment from the ND2 gene, at base positions 501-950

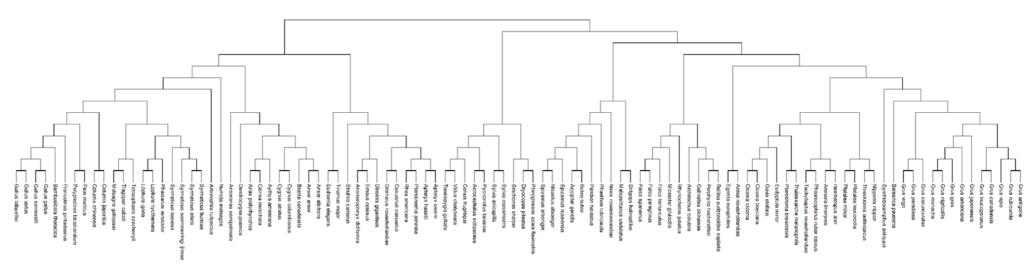


Figure C.77: Phylogenetic tree reconstruction of the 450 bp segment from the ND2 gene, at base positions 601-1041

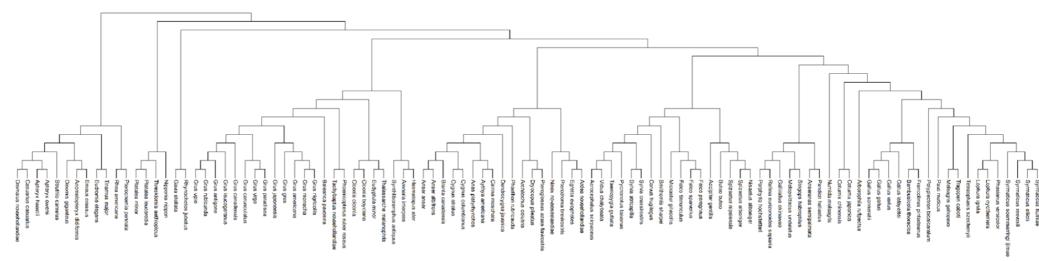


Figure C.78: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 1-450

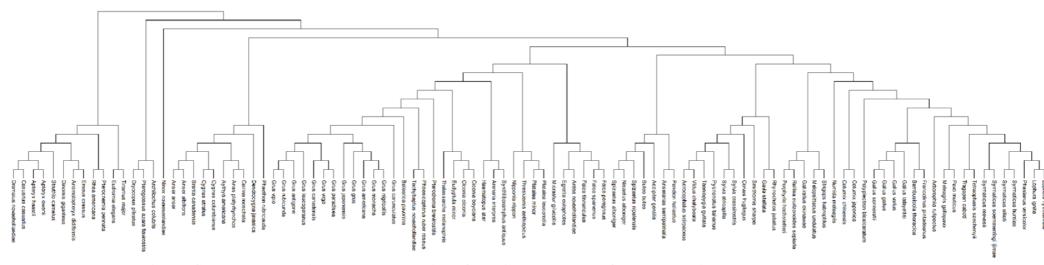


Figure C.79: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 101-550

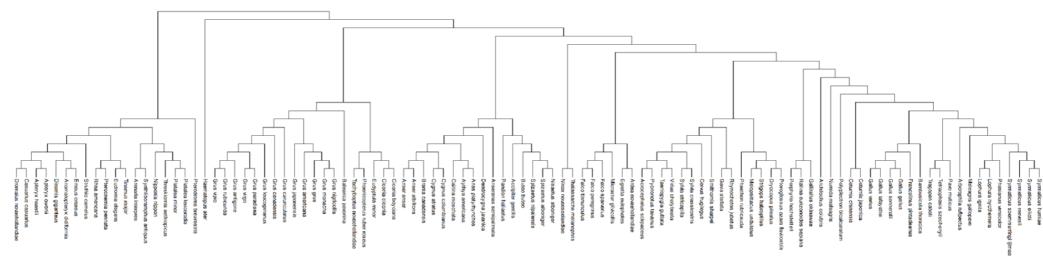


Figure C.80: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 201-650

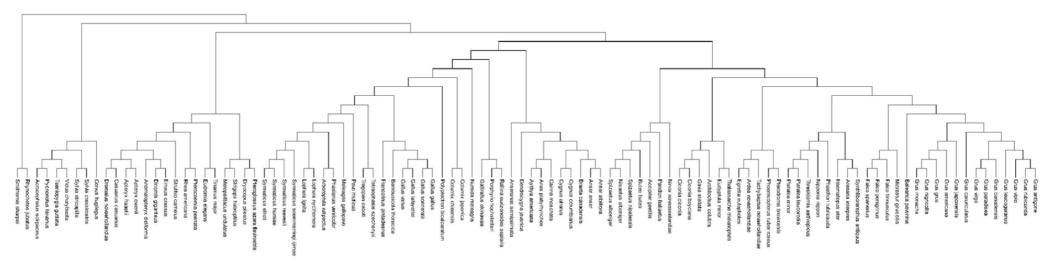


Figure C.81: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 301-750

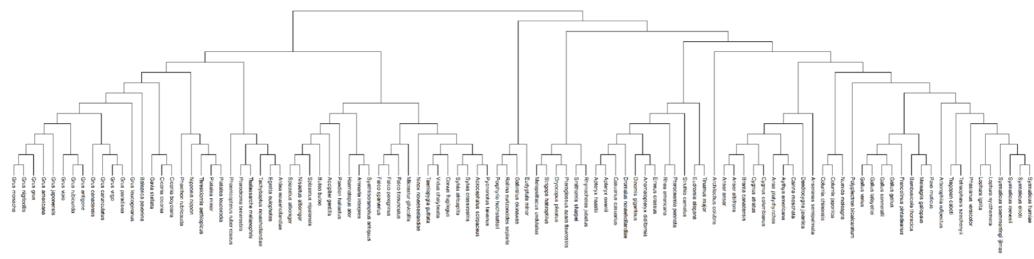


Figure C.82: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 401-850

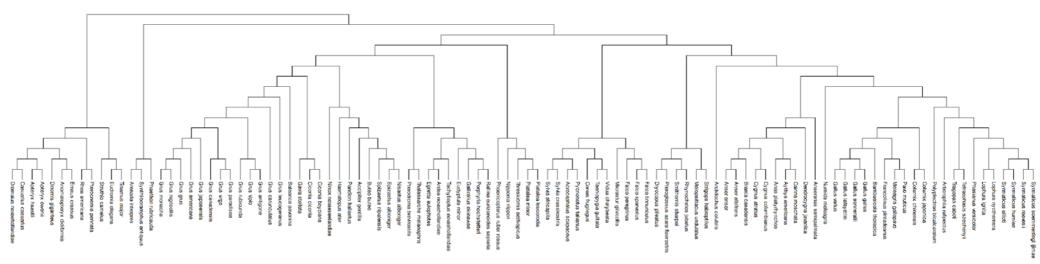


Figure C.83: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 501-950

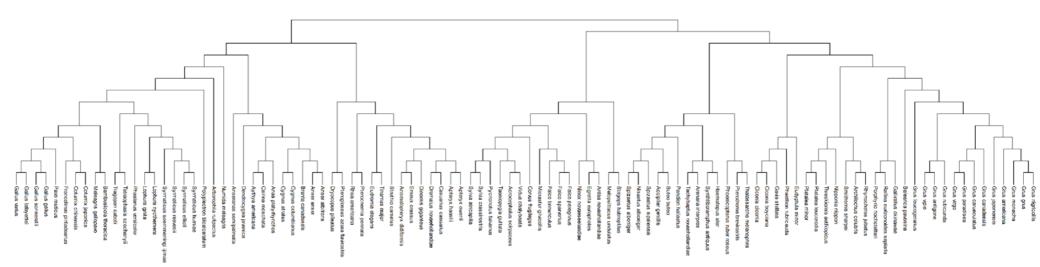


Figure C.84: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 601-1050

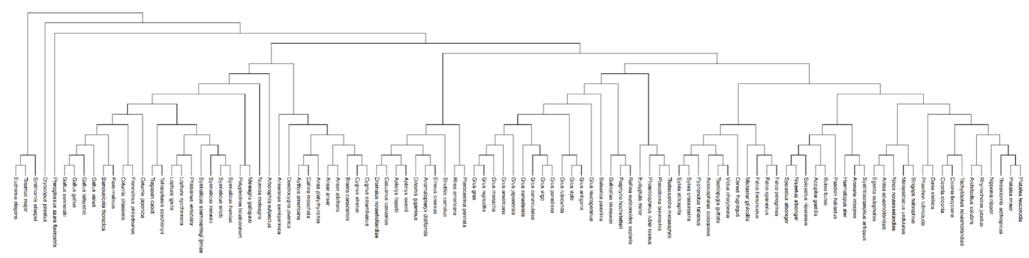


Figure C.85: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 701-1150

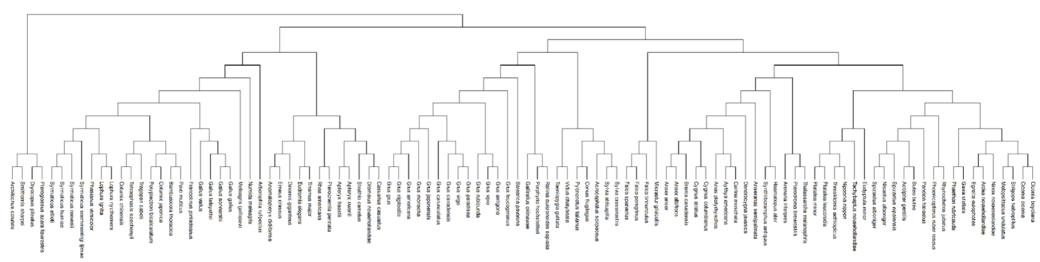


Figure C.86: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 801-1250

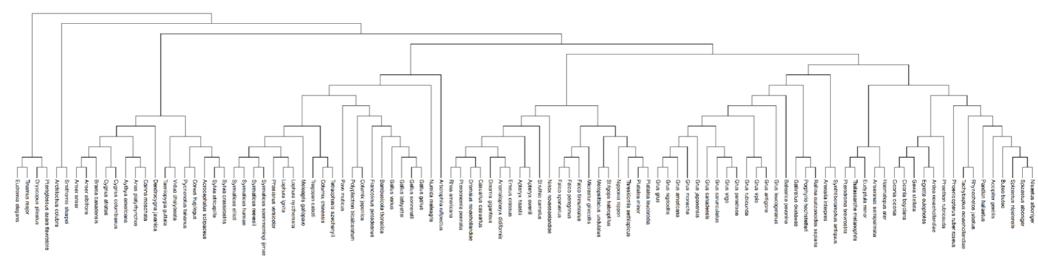


Figure C.87: Phylogenetic tree reconstruction of the 450 bp segment from the ND4 gene, at base positions 901-1375

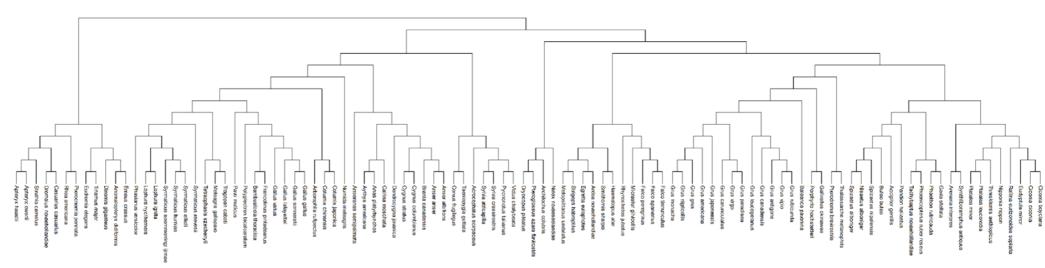


Figure C.88: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 1-450

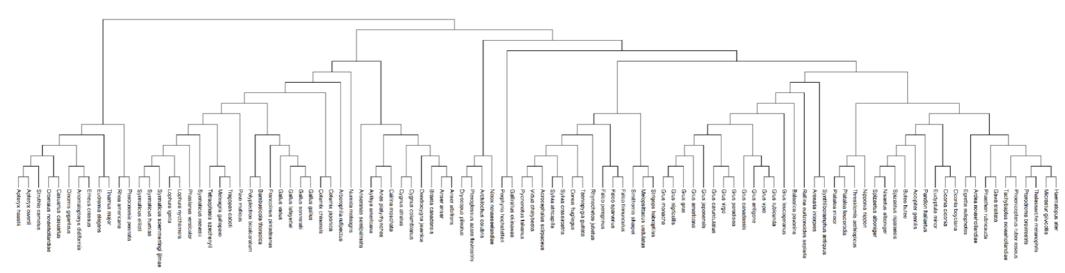


Figure C.89: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 101-550

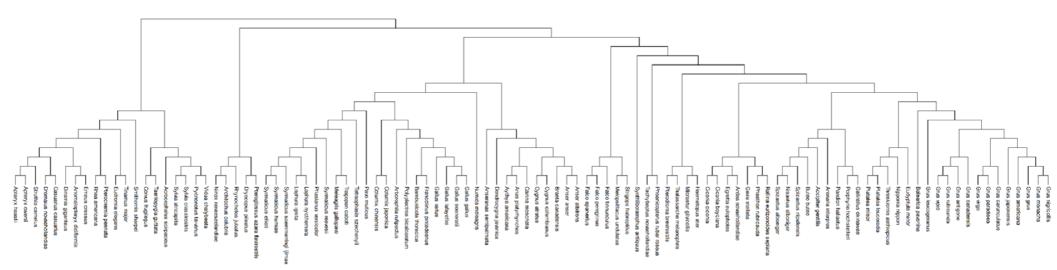


Figure C.90: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 201-650

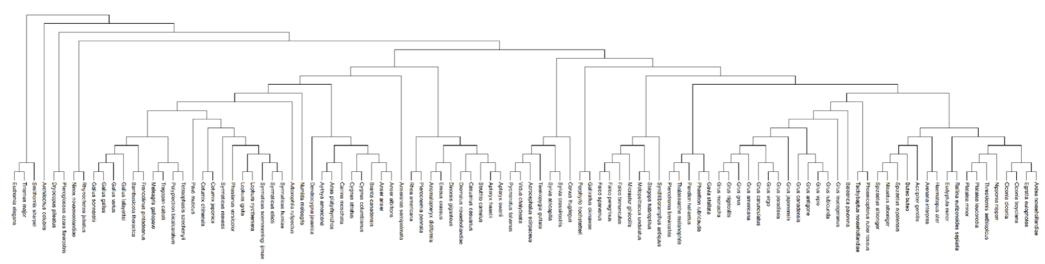


Figure C.91: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 301-750

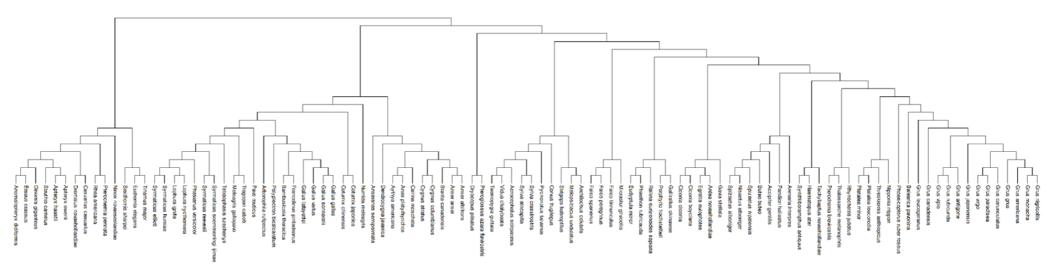


Figure C.92: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 401-850

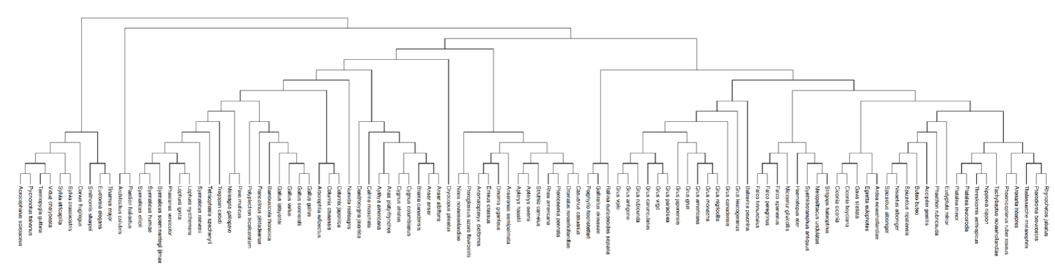


Figure C.93: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 501-950

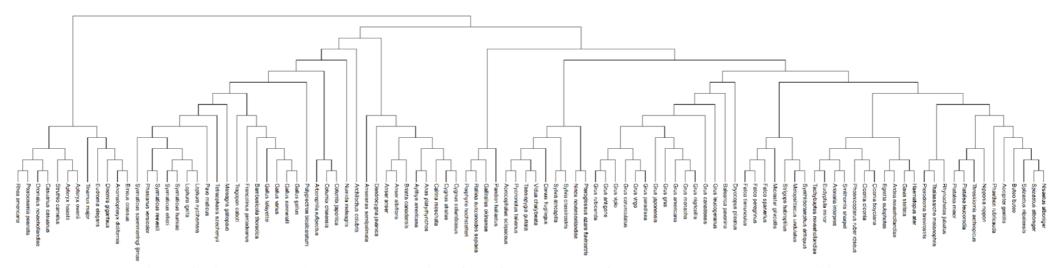


Figure C.94: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 601-1050

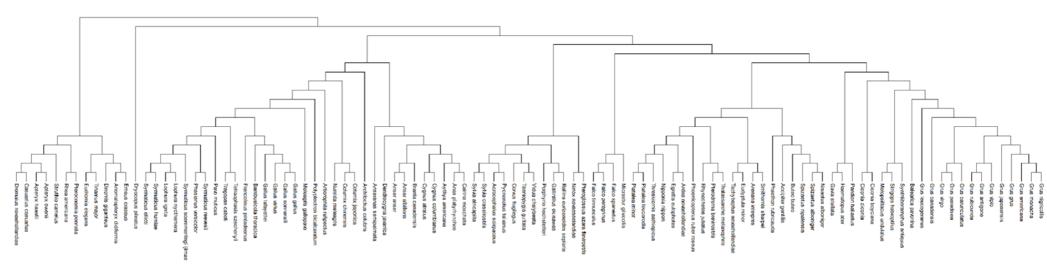


Figure C.95: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 701-1150

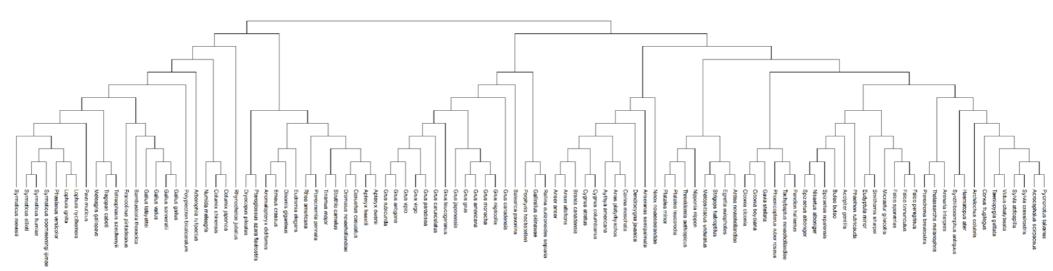


Figure C.96: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 801-1250

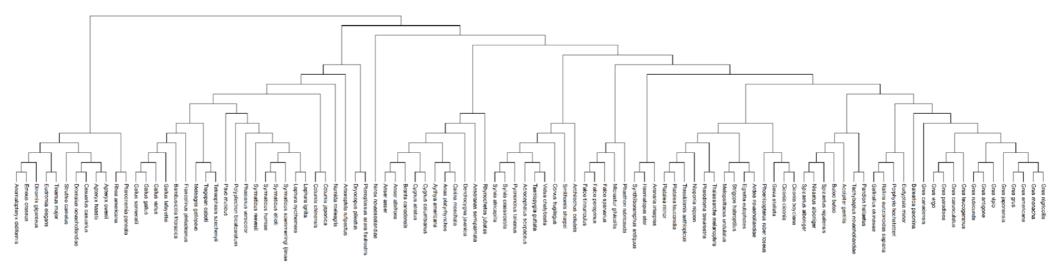


Figure C.97: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 901-1350

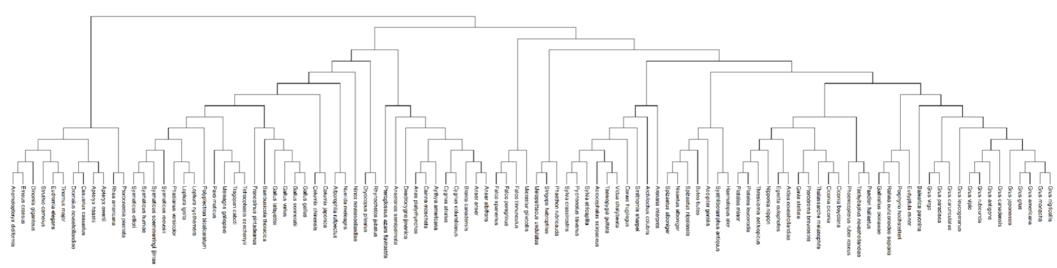


Figure C.98: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 1001-1450

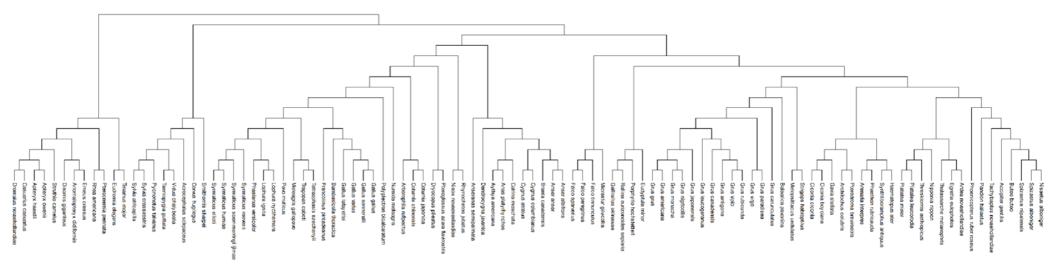


Figure C.99: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 1101-1550

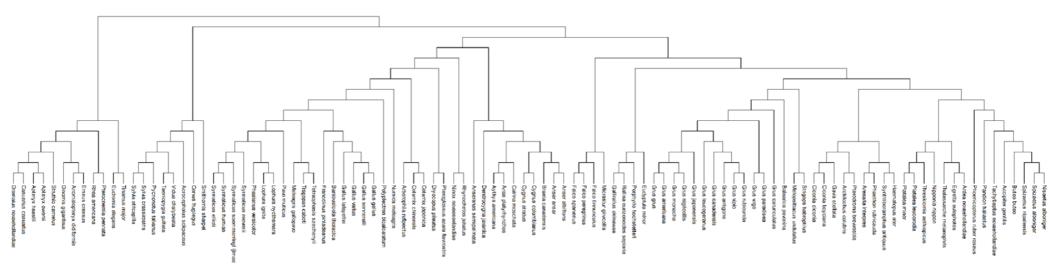


Figure C.100: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 1201-1650

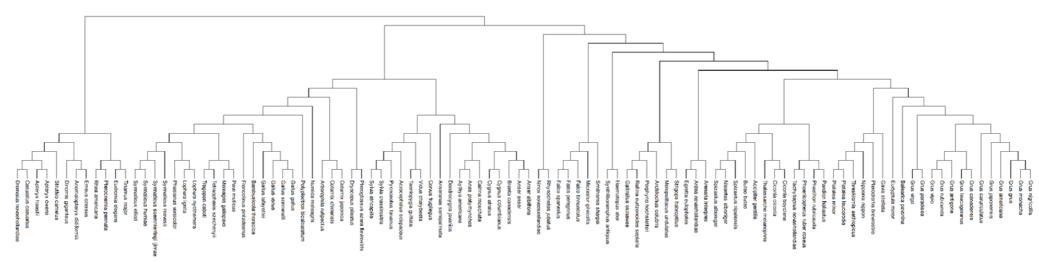


Figure C.101: Phylogenetic tree reconstruction of the 450 bp segment from the ND5 gene, at base positions 1301-1800

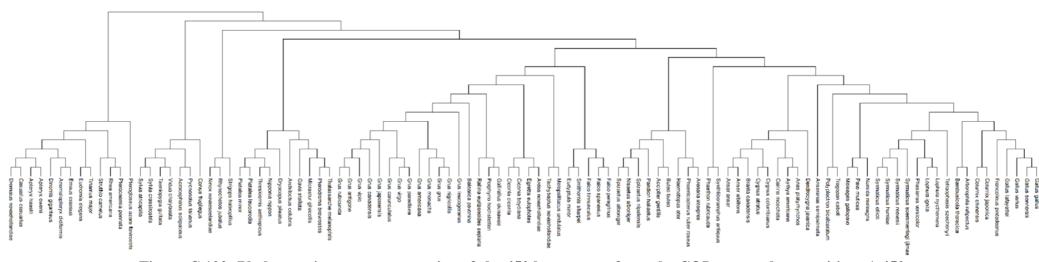


Figure C.102: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 1-450

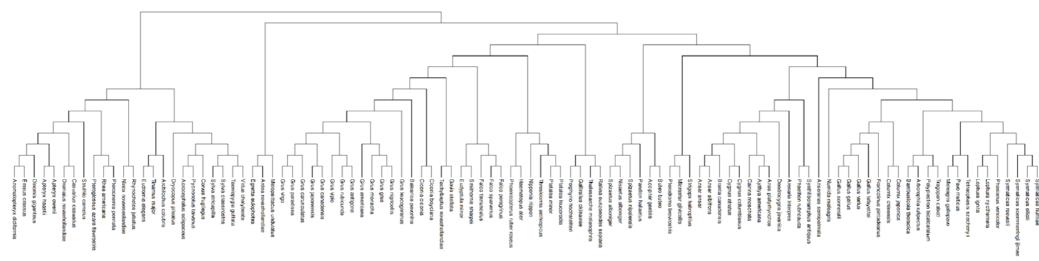


Figure C.103: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 101-550

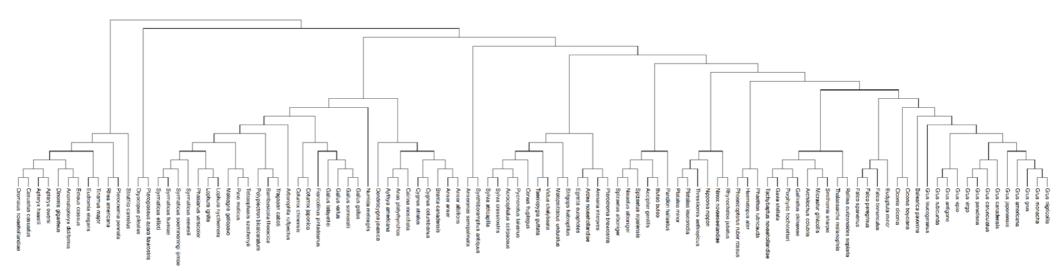


Figure C.104: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 201-650

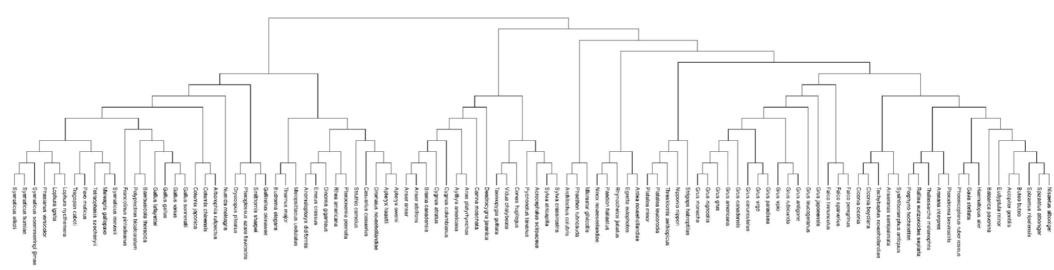


Figure C.105: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 301-750

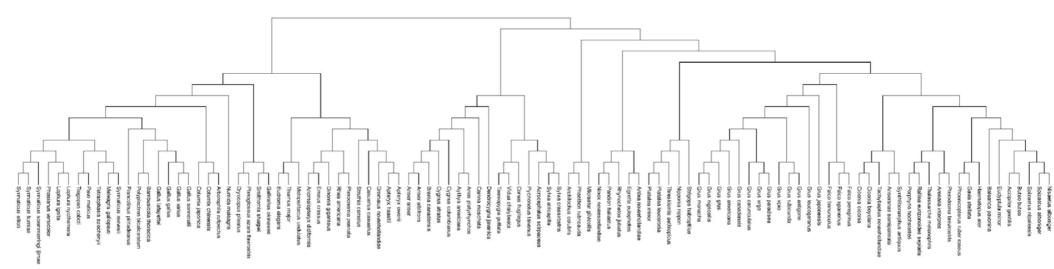


Figure C.106: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 401-850

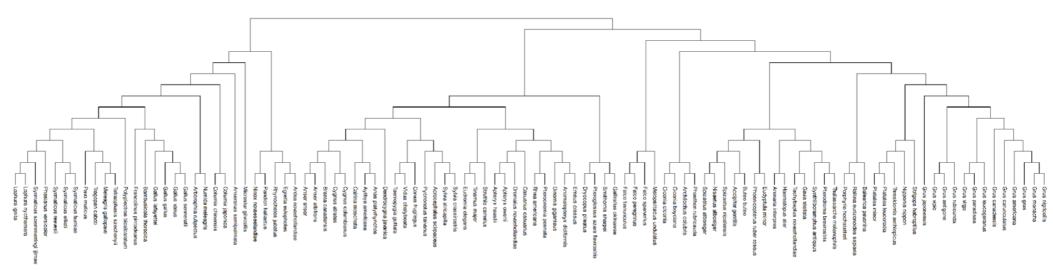


Figure C.107: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 501-950

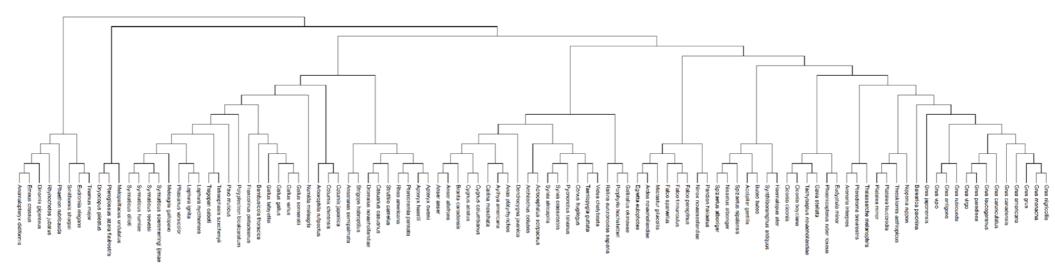


Figure C.108: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 601-1050

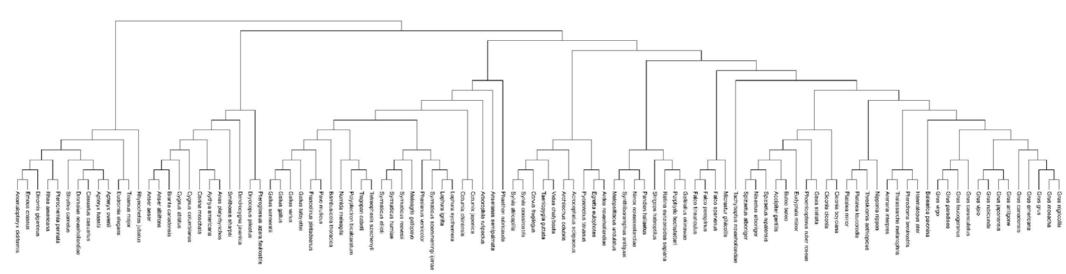


Figure C.109: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 701-1150

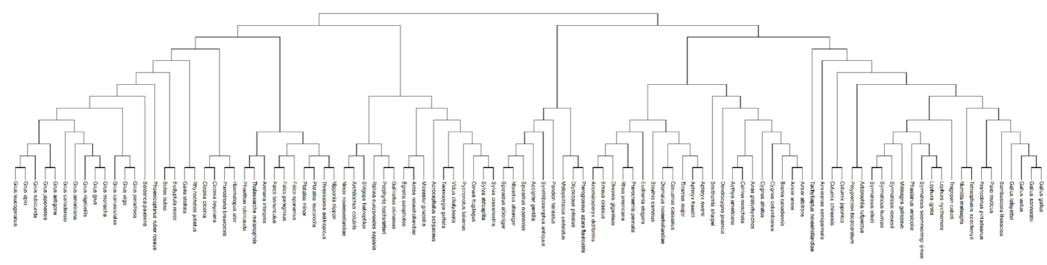


Figure C.110: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 801-1250

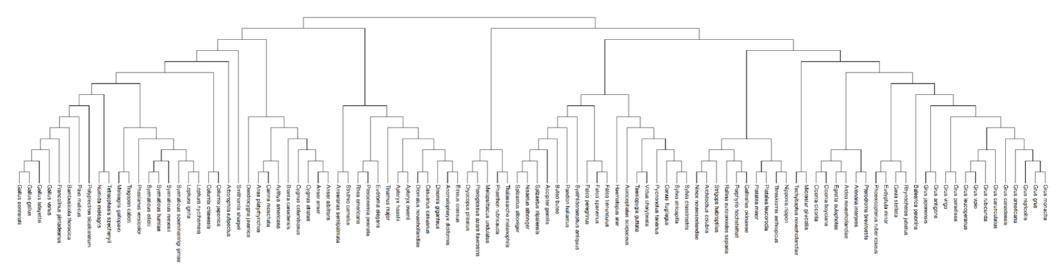


Figure C.111: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 901-1350

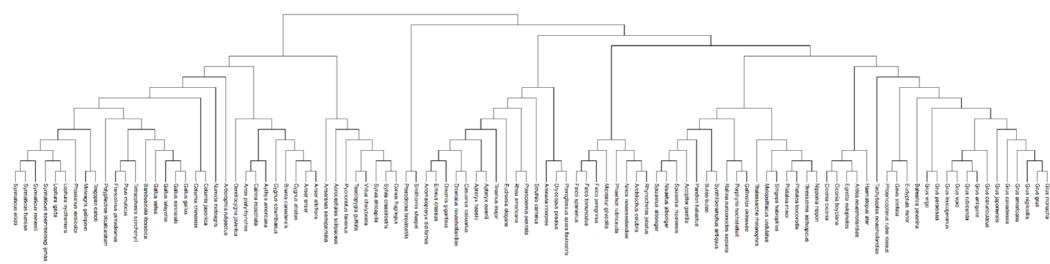


Figure C.112: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 1001-1450

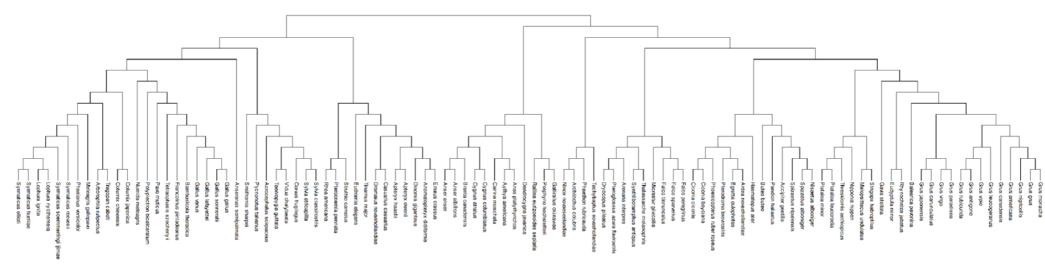


Figure C.113: Phylogenetic tree reconstruction of the 450 bp segment from the COI gene, at base positions 1101-1551

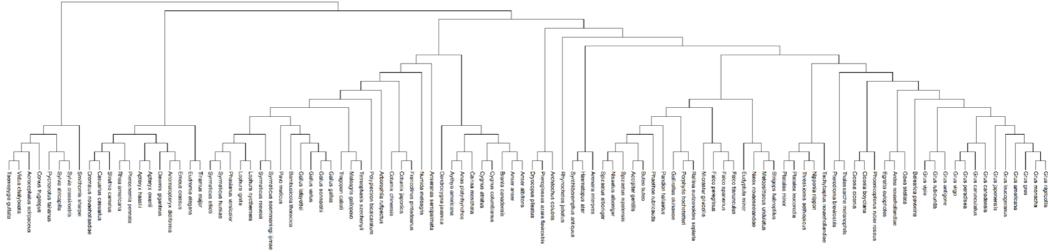


Figure C.114: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 1-450

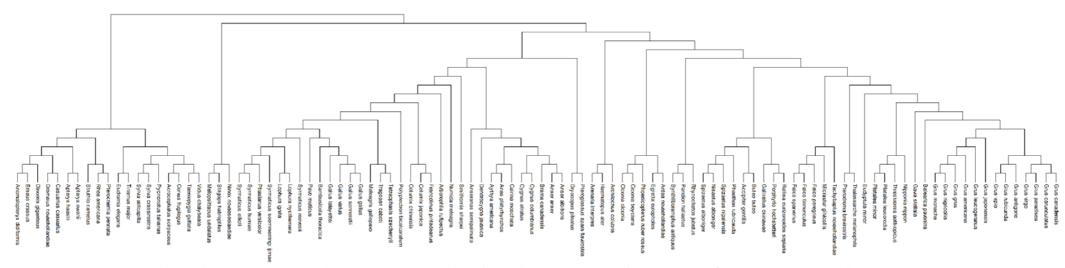


Figure C.115: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 101-550

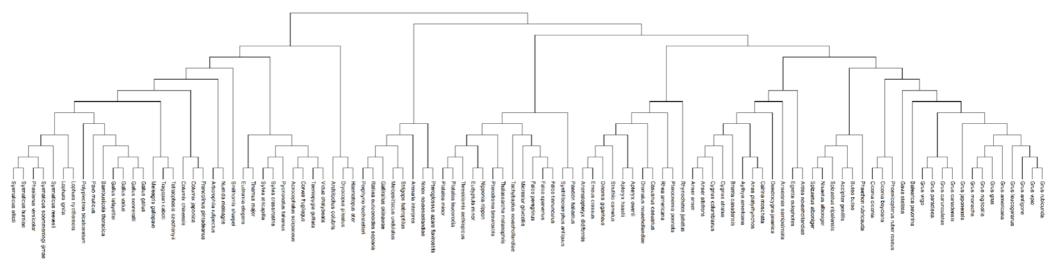


Figure C.116: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 201-650

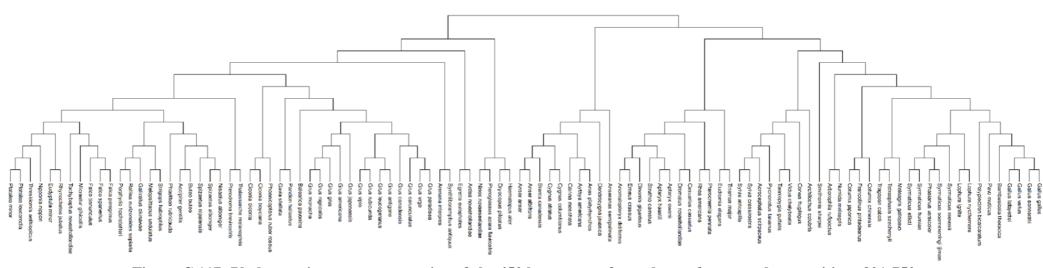


Figure C.117: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 301-750

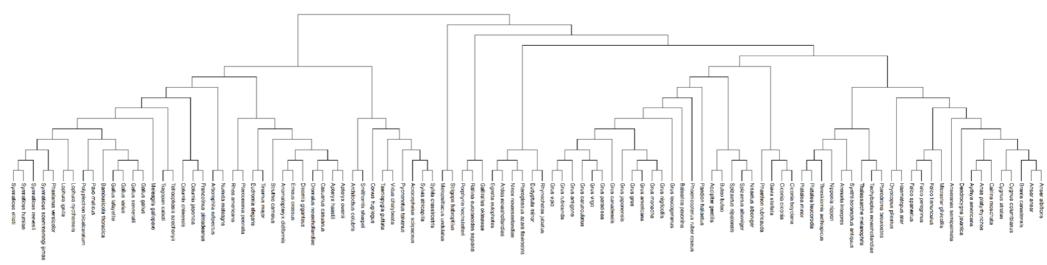


Figure C.118: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 401-850

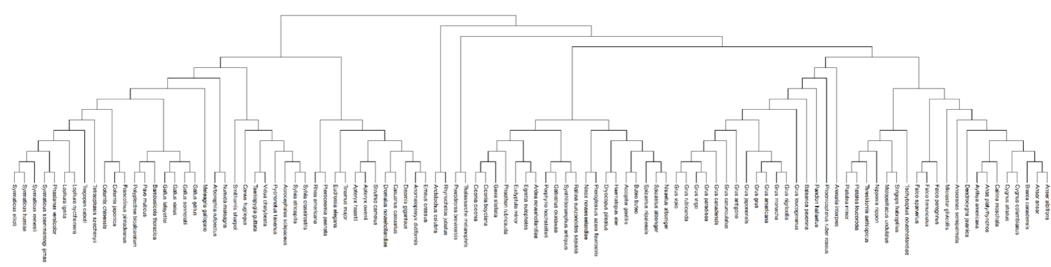


Figure C.119: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 501-950

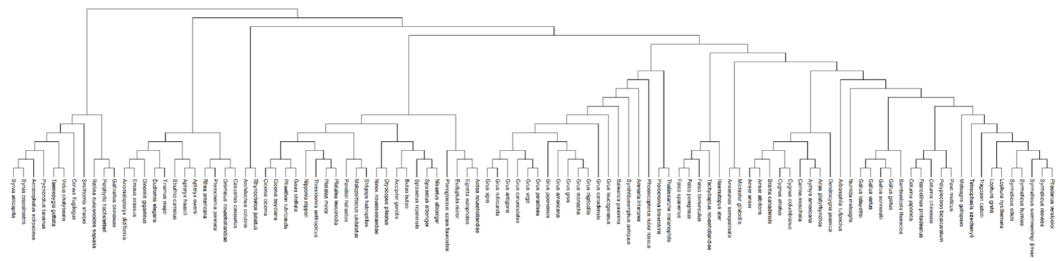


Figure C.120: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 601-1050

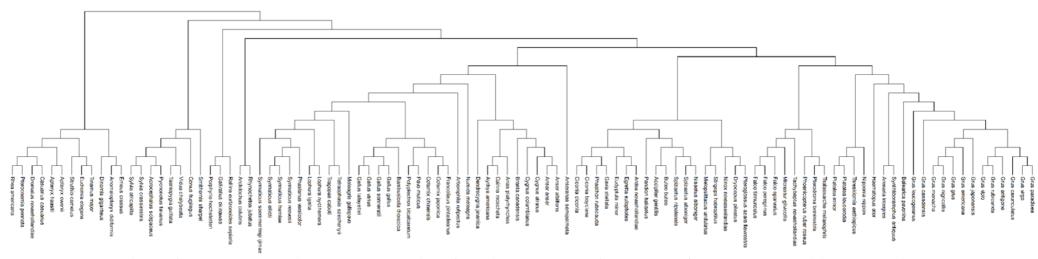


Figure C.121: Phylogenetic tree reconstruction of the 450 bp segment from the cyt b gene, at base positions 701-1143