Supplement of Biogeosciences, 12, 1525–1535, 2015
http://www.biogeosciences.net/12/1525/2015/
doi:10.5194/bg-12-1525-2015-supplement

Biogeosciences Open Access

Supplement of

A 22 570-year record of vegetational and climatic change from Wenhai Lake in the Hengduan Mountains biodiversity hotspot, Yunnan, Southwest China

Y. F. Yao et al.

Correspondence to: Y. F. Yao (yaoyf@ibcas.ac.cn) and C. S. Li (lics@ibcas.ac.cn)

Supplementary material

Figure S1. A comparison of palynomorphs recovered from the Wenhai core and the surface samples

Figure S2. A selection of palynomorphs recovered from Wenhai core sediments. 1,17. Polygonaceae, 2. Caprifoliaceae, 3. Ericaceae, 4. *Tilia* L., 5,6. *Quercus* L., 7. Compositae, 8,9. *Betula* L., 10. Loranthaceae, 11,12. Oleaceae, 13. Hamamelidaceae, 14. *Castanopsis* (D.Don) Spach ., 15. Rosaceae, 16. *Ulmus* L., 18. *Alnus* Mill., 19. *Artemisia* L., 20. Cyperaceae, 21. Caryophyllaceae, 22. Gramineae, 23,24. Umbelliferae, Scale bar=50 μm

Figure S3. A selection of palynomorphs recovered from Wenhai core sediments (continued). 1. *Abies* Mill., 2. *Picea* Dietr., 3,4. *Tsuga* Carr., 5,6. *Pinus* L., 7,16. Polypodiaceae, 8,9. *Pteris*, 10,11,13,14. Gymnogrammaceae, 12. Dennstaedtiaceae, 15. Athyriaceae, 17. Cyatheaceae, Scale bar=50 μm

Figure S4. Lithology of the Wenhai core and depth-age curve showing rate of sedimentation

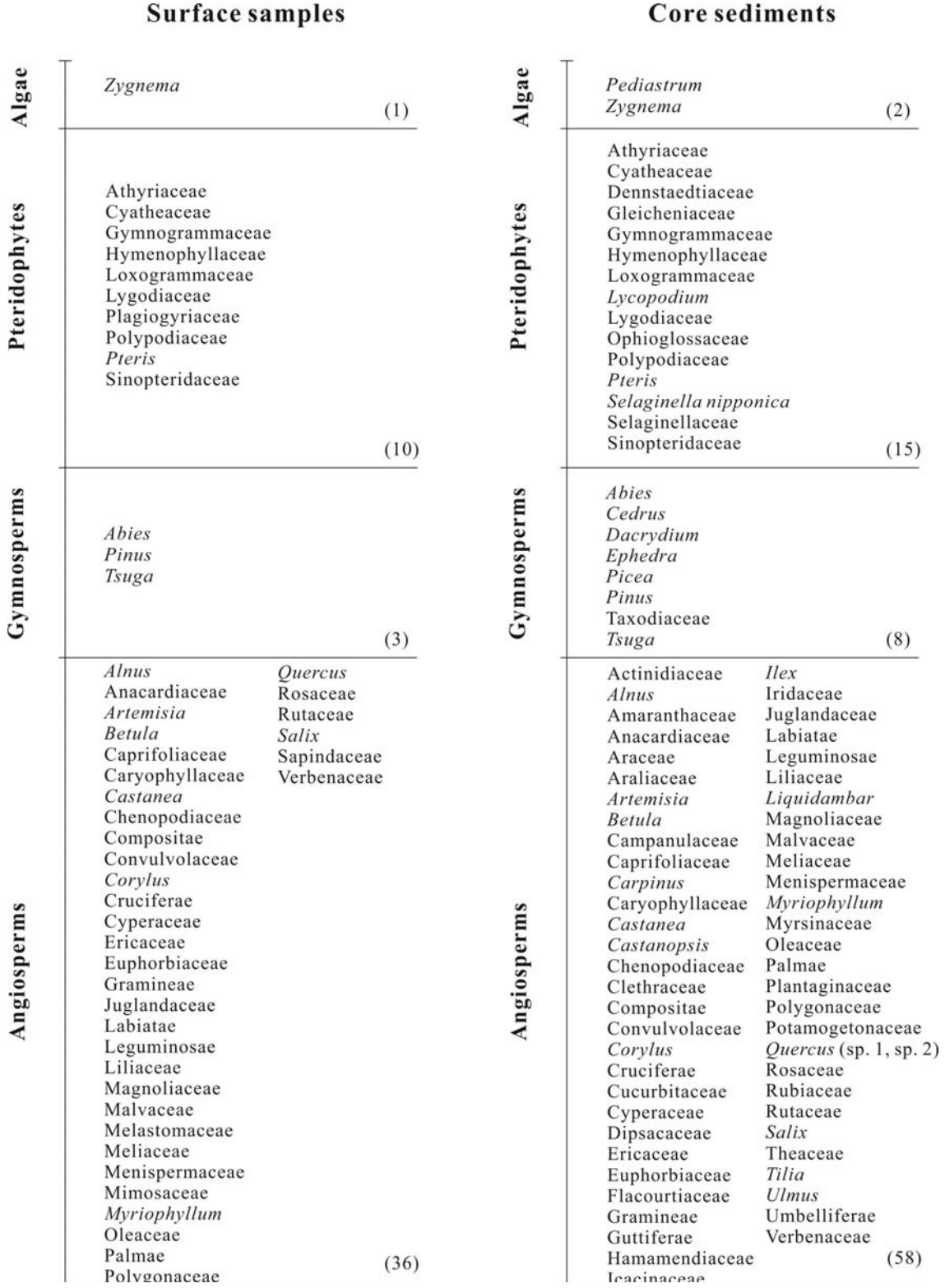
Surface samples
Core sediments
Algae
Pteridophytes
Gymnosperms
Angiosperms
Zygnema
(1)
Athyriaceae
Cyatheaceae
Gymnogrammaceae
Hymenophyllaceae
Loxogrammaceae
Lygodiaceae
Plagiogyriaceae
Polypodiaceae
Pteris
Sinopteridaceae
(10)
Abies
Pinus
Tsuga
(3)
Alnus
Anacardiaceae
Artemisia
Betula
Caprifoliaceae
Caryophyllaceae
Castanea
Chenopodiaceae
Compositae
Convulvolaceae
Corylus
Cruciferae
Cyperaceae
Ericaceae
Euphorbiaceae
Gramineae
Juglandaceae
Labiatae
Leguminosae
Liliaceae
Magnoliaceae
Malvaceae
Melastomaceae
Meliaceae
Menispermaceae
Mimosaceae
Myriophyllum
Oleaceae
Palmae
Polygonaceae
Quercus
Rosaceae
Rutaceae
Salix
Sapindaceae
Verbenaceae
(36)
Pediastrum
Zygnema
(2)
Athyriaceae
Cyatheaceae
Dennstaedtiaceae
Gleicheniaceae
Gymnogrammaceae
Hymenophyllaceae
Loxogrammaceae
Lycopodium
Lygodiaceae
Ophioglossaceae
Polypodiaceae
Pteris
Selaginella nipponica
Selaginellaceae
Sinopteridaceae
(15)
Abies
Cedrus
Dacrydium
Ephedra
Picea
Pinus
Taxodiaceae
Tsuga
(8)
Actinidiaceae
Alnus
Amaranthaceae
Anacardiaceae
Araceae
Araliaceae
Artemisia
Betula
Campanulaceae
Caprifoliaceae
Carpinus
Caryophyllaceae
Castanea
Castanopsis
Chenopodiaceae
Clethraceae
Compositae
Convulvolaceae
Corylus
Cruciferae
Cucurbitaceae
Cyperaceae
Dipsacaceae
Ericaceae
Euphorbiaceae
Flacourtiaceae
Gramineae
Guttiferae
Hamamendiaceae
Icacinaceae
Ilex
Iridaceae
Juglandaceae
Labiatae
Leguminosae
Liliaceae
Liquidambar
Magnoliaceae
Malvaceae
Meliaceae
Menispermaceae
Myriophyllum
Myrsinaceae
Oleaceae
Palmae
Plantaginaceae
Polygonaceae
Potamogetonaceae
Quercus (sp. 1, sp. 2)
Rosaceae
Rubiaceae
Rutaceae
Salix
Theaceae
Tilia
Ulmus
Umbelliferae
Verbenaceae
(58)

Figure S1

Figure S2

Figure S3

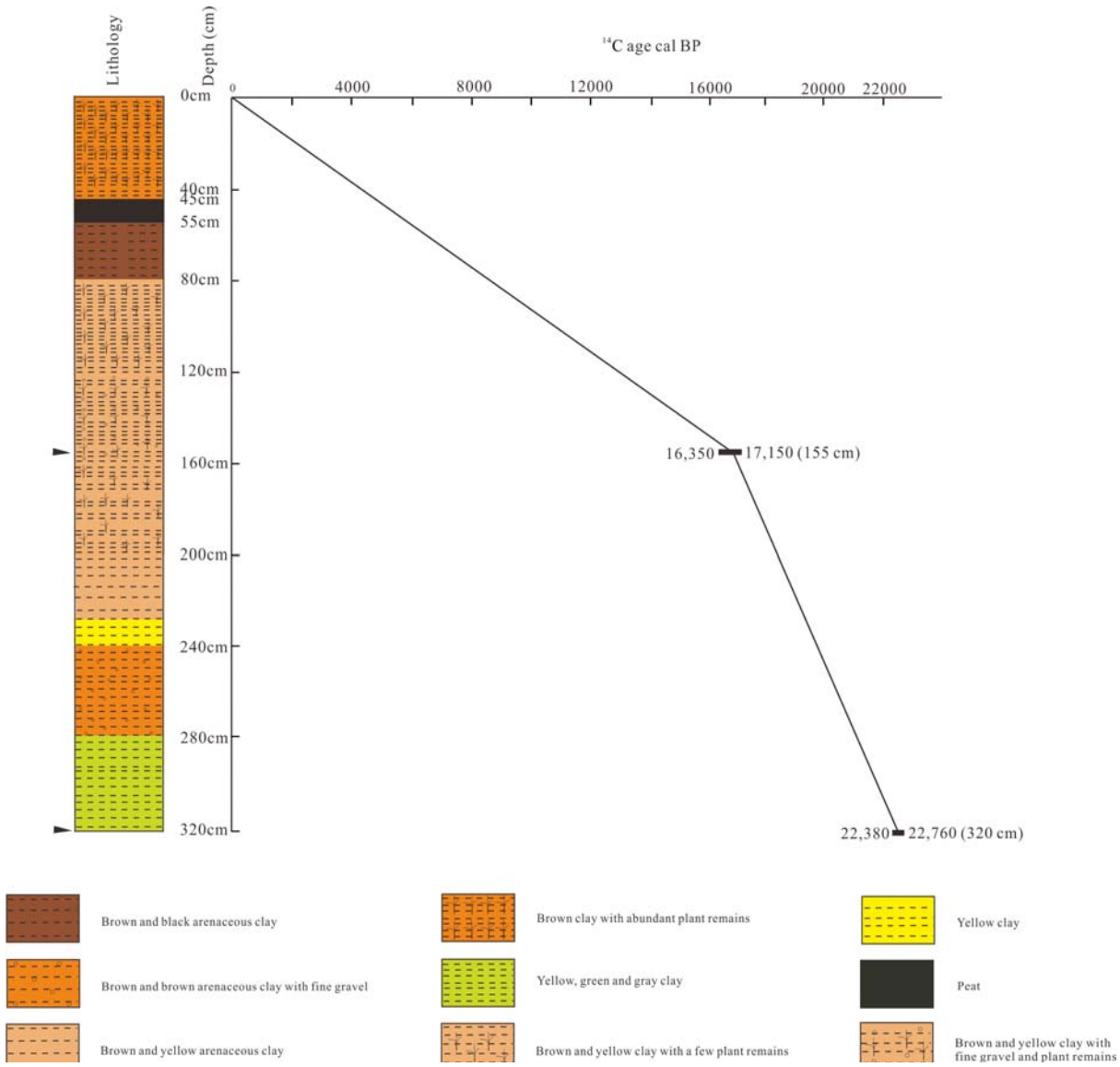
Lithology
Depth (cm)
^{14}C age cal BP
0
4000
8000
12000
16000
20000
22000
0cm
40cm
45cm
55cm
80cm
120cm
160cm
200cm
240cm
280cm
320cm
16,350
17,150 (155 cm)
22,380
22,760 (320 cm)
Brown and black arenaceous clay
Brown and brown arenaceous clay with fine gravel
Brown and yellow arenaceous clay
Brown clay with abundant plant remains
Yellow, green and gray clay
Brown and yellow clay with a few plant remains
Yellow clay
Peat
Brown and yellow clay with fine gravel and plant remains

Figure S4