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Abstract

We reconstructed paleovegetation changes on the Chinese Loess Plateau by applying concepts in palynology and pollination biology to the statistical analysis of the size of *Artemisia* pollen grains from 26 surface samples, four loess paleosoil profiles, and extant *Artemisia* species. We found that the size of *Artemisia* pollen grains varied in different plant communities, and was positively correlated with local habitat quality and population density of local *Artemisia* communities. The