

EARLY ANGIOSPERM FOSSIL LEAVES IN CHUBUT GROUP,
CRETACEOUS, ARGENTINA.

ROMERO*, Edgardo J., Dept. of Biology, FCEN, University of Buenos Aires, Intendente Guiraldes 2620, (1428) Buenos Aires, Argentina; PALMA, Ricardo, Dept. of Geology, FCEN, University of Buenos Aires, Intendente Guiraldes 2620, (1428) Buenos Aires, Argentina.

The oldest angiosperm leaves from Patagonia were reported from Baquero Formation (Barremian-Aptian) in a mesofitic flora of more than one hundred gymnosperm and fern species. The next younger records are from the Chubut Group, a thick assemblage of pyroclastic sediments, with sand and conglomerate facies and frequent paleosols. In the Sierra de San Bernardo area sediments are mainly tufaceous and fluvial, deposited under an arid climate in shallow lakes and swamps of the alluvial plains. The sea was hundreds of kilometers to the West. Four Formations were described: Matasiete (Aptian), Castillo and Bajo Barreal (Senonian) and Laguna Palacios (Campanian-Maastrichtian). We explored in the Senonian Formations, and studied a few outcrops that can be sorted as:

a) Monospecific, with only Onychiopsis sp., in palustral sediments. b) Strongly dominated by Equisetum sp., and few remains of two dicot species with large, entire margined, low rank leaves, in palustral sediments. c) Strongly dominated by two species of angiosperms with small leaves, associated with remains of conifers in tufaceous beds deposited in the alluvial plain. d) Dominated by a few species of dicots, with medium size, entire margined leaves. Also with about 10 species of ferns, gymnosperms and lobate angiosperms. They are in alluvial plains sediments. e) More balanced associations, with several abundant species, including angiosperms with lobate and leaves. They are in fluvial sediments.

Although angiosperm radiation and taphonomy undoubtedly accounts for differences of plant composition between outcrops, it seems apparent that the record of early angiosperms in Chubut Group is represented by remains of many different plant associations, with few species, adapted to different environments, that probably coexisted, and developed under an arid climate, far from the sea.