| Basin (Reference) | Formation/Site | Sample | Age[a] | # Grains Analyzed | # Grains >2σ blank | Modified Threshold[b] | % $C_4$-Grass Pollen using Modified Threshold[c] | % $C_4$-Grass Pollen using Modified Threshold +1.0‰[c] | % $C_4$-Grass Pollen using Modified Threshold +2.0‰[c] | % $C_4$-Grass Pollen using Modified Threshold +3.0‰[c] |
|---|---|---|---|---|---|---|---|---|---|---|
| Rubielos de Mora (Jiménez-Moreno et al., 2007) | Rubielos de Mora-1 | RUM 19 | Langhian/ Burdigalian (15 - 20 Ma) | 190 | 63 (33%) | -19.4‰ | 32.8% | 28.1% (23.4-32.8) | 23.4% (21.9-28.1) | 21.9% (17.2-23.4) |
| | | RUM 32 | | 165 | 87 (53%) | -19.4‰ | 26.4% | 23.0% (20.7-26.4) | 20.7% (19.5-22.3) | 19.5% (16.1-20.7) |
| | | RUM 57 | | 158 | 91 (57%) | -19.7‰ | 37.4% | 35.2% (29.7-37.4) | 29.7% (23.1-35.2) | 23.1% (20.8-29.7) |
| | | RUM 76 | | 139 | 100 (72%) | -20.2‰ | 40.0% | 35.0% (32.0-40.0) | 32.0% (28.0-35.0) | 28.0% (24.0-32.0) |
| Provence Basin (Châteauneuf & Nury 1995) | Aix en Provence | PR1-135 | Chattian (24-27.5 Ma) | 222 | 82 (37%) | -20.2‰ | 37.8% | 35.4% (32.9-37.8) | 32.9% (32.9-35.4) | 32.9% (31.7-32.9) |
| | | PR1-155 | | 199 | 98 (49%) | -20.2‰ | 29.6% | 25.5% (20.4-29.6) | 20.4% (17.4-25.2) | 17.4% (15.3-20.4) |
| Paris Basin (Châteauneuf 1980) | Bois d' Automne | N B4 | Lower Rupelian (32-33 Ma) | 217 | 86 (40%) | -19.8‰ | 47.7% | 43.0% (39.5-47.7) | 39.5% (37.2-43.0) | 37.2% (33.7-39.5) |
| | Mezières | Well 55a | Priabonian-Rupelian (33 - 34 Ma) | 221 | 79 (36%) | -19.9‰ | 62.0% | 58.2% (43.0-62.0) | 53.2% (43.0-58.2) | 43.0% (39.2-53.2) |

[a]As provided in the references for each site.

[b]modifed from -19.2‰ to compensate for changes in $\delta^{13}C$ of atmospheric $CO_2$ using an offset of -8‰ between $\delta^{13}C$ of atmospheric $CO_2$ and marine carbonate, as described in the text.

[c]numbers in paratheses represent range of % $C_4$-grass pollen using -7‰ and -9‰ offset between $\delta^{13}C$ of atmospheric $CO_2$ and marine carbonate.