A total of 20 extracts derived from different plant family commonly used in Indonesian traditional inflammation medicine were screened for their inhibitory effect on soybean lipoxygenase (SBL) and hyaluronidase (HAs) activity. Three methanol extracts, the bark of Cinnamomum burmanni (CB), the leaves of Piper betel (PB), and fruit of Barringtonia acutangula (BA) were found to have high inhibitory effects, whereas the methanol extract of the leaves of Mimusops elengi (ME) have medium inhibitory effect. The IC50 of CB, PB, BA and ME were found to be 21.7, 16.9, 39.1 and 62.8 g/ml,