1024-11-32   **F Thaine*** (`ftha@alcor.concordia.ca`). *On the construction of families of cyclic polynomials whose roots are algebraic units.*

For several values of m, we show ways to construct some one-parameter families of cyclic monic polynomials of degree m with integer coefficients and constant terms ± 1, and to express their roots in terms of Gaussian periods. We give several examples of such families and their roots, including some well-known ones as Emma Lehmer's family of degree 5 and some new ones of degrees 5,6,8 and 9. Given a k-parameters family of degree m and an l-parameters family of degree n, with g.c.d.$(m,n) = 1$, we show how to construct a $(k+l)$-parameters family, as above, of degree mn. (Received December 06, 2006)