Abstract: Inspired by the paper V. Bargmann, Comm. Pure Appl. Math. 14 (1961) 187, we construct three types of coherent states related with the Hermite polynomials in complex variable and non-rotationally invariant measure. Relations between these coherent states are investigated. We also find the relation between considered states and the squeezed states. (Work done with A. Horzela and F. H. Szafraniec).