ABSTRACT: The determination of Zinc Concentration (Zn) in seaweed (*Eucheuma cotonii*) from Kwandang sub district Ponelo beach by Atomic Absorption Spectrophotometry Method. This is search aim to know the Zinc Concentration in seaweed (*E. cotonii*) from Kwandang sub district beach with Atomic Absorption Spectrofotometry Method. This process begins with destructed the sample which is clean from organic compounds. Based on the measurement of standard soluble of Zn got the calibration curve with linier equilibration $Y = 0.3481 + 0.0766 \times$ and the Zn concentration in sample from Kwandang sub district Gorontalo beach district is 1.862 mg/mL in 8.02 gram sample.

Key word: Seaweed, Zn, AAS