Age growth in childhood very vulnerable to contracting various diseases due to resistant disease or children is weak immune. The utilization plant use as traditional treatment disease for children in Guluk-Guluk Subdistric Sumenep Madurase Regency has been done for regenerations. But, currently there is a tendency of cultural heritage began to be abandoned by society. This reasearch purpose to conserve Indigenous Knowledge and diversity of plant is use as traditional treatment disease for children in Guluk-Guluk Subdistric Sumenep Madurase. This reasearch was conducted from April until May 2011 witch took place in 3 villages, that is Guluk-guluk village, Payudang Dundang village, and Ketawang laok village Guluk-guluk Subdistric Sumenep Madurase Regency. The type of research is a descriptive exploratory with semi-structured interview and structured interview methode. be accompanied with Participatory Ethnobotanical Appraisal (PEA). The research sample consisted of 60 respondents from: (1) society that are considered to know about traditional treatment like as (shaman children, indigenous elders) totaling at least 3 people to each village; (2) society like as (mothers wich ever heard and making traditional medicines) totaling 20 people to each village.

Based on result of reasearch known any 40 variety of plant be used as traditional treatment for children. The most plant use as tretment from family of Zingiberaceae like Curcuma domestica Val., Curcuma xanthorrhiza Roxb., Curcuma zedoaria (Berg.) Roscoe. Organ plant is use like leaves for 27%, rhizome 24%, fruit 22%, completely organ 8%, root tuber 6%, stem 5%, bark 4%, radix 3%, and flower 1%. The treatment process like boiled for 54%, squeezed for 26% and crushed 20% from plant the treatment with dipopok, be rub, dicekok and be drunk. Types of diseases can tretment like fever, diarrhea, cough, typus, intestinal worms, abdominal bloating, poor appetite, constipation, itching and skin rash. Society gain by cultured plant for 66%, wild 21%, and buying in market for 13%. High use value from plant wich use is Cocus nucifera L with value 4, low use value is Jatropha curcas L., Elephantopus scabes L., and Ocimum basilicum L. With value 1.