

KAJIAN ETNOSAINS TRADISI *GEBUG ENDE* SERAYA DI DESA PATAS, KECAMATAN GEROKGAK DAN RELEVANSINYA PADA MATERI IPA SMP

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ABSTRAK

Penelitian ini bertujuan untuk mengkaji konsep etnosains dalam Tradisi *Gebug Ende* Seraya di Desa Patas, Kecamatan Gerokgak, serta menganalisis relevansinya dengan materi IPA SMP. Penelitian ini menggunakan metode kualitatif deskriptif dengan pendekatan etnosains. Melalui teknik purposive sampling diperoleh subjek penelitian yang terdiri dari seniman *gebug Ende*, tokoh masyarakat, serta guru IPA di SMP Negeri 5 Gerokgak. Teknik pengumpulan data dilakukan melalui observasi, wawancara, dokumentasi, dan angket. Data yang diperoleh dianalisis secara deskriptif untuk mengidentifikasi sarana, tahapan pelaksanaan tradisi, serta konsep-konsep sains yang terkandung di dalamnya. Hasil penelitian menunjukkan bahwa sarana utama Tradisi *Gebug Ende* Seraya adalah *Penyalin* (tongkat pemukul dari rotan) dan *Ende* (Tameng atau alat pelindung diri). Tahapan pelaksanaannya meliputi prosesi *matur piuning*, persiapan alat dan busana, hingga pementasan yang dipimpin oleh *saye* (wasit). Kajian etnosains dalam tradisi ini menunjukkan adanya pengetahuan lokal masyarakat yang kemudian direkonstruksi menjadi konsep sains ilmiah, antara lain: getaran dan gelombang (bunyi *gamelan*), ekologi (bahan alami pada *banten*), klasifikasi makhluk hidup (sumber daya hayati alat), pengukuran (dimensi alat), tekanan zat padat (peruncingan rotan), suhu dan kalor (proses pengeringan bahan), serta gaya dan gerak (aktivitas bertarung pemain). Temuan ini menunjukkan bahwa keterkaitan konsep ilmiah didominasi oleh relevansi yang kuat dengan Capaian Pembelajaran (CP) IPA SMP Fase D pada elemen gaya, gerak, dan energi, serta didukung oleh elemen sistem organ pada manusia, sehingga tradisi ini sangat potensial diintegrasikan sebagai sumber pembelajaran yang kontekstual dan bermakna bagi siswa.

Kata Kunci: Etnosains, *Gebug Ende* Seraya, Konsep Sains Ilmiah, Pembelajaran IPA SMP.

**ETHNOSCIENCE STUDY OF THE *GEBUG ENDE SERAYA*
TRADITION IN PATAS VILLAGE, GEROKGAK DISTRICT,
AND ITS RELEVANCE TO JUNIOR HIGH SCHOOL SCIENCE
MATERIALS**

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ABSTRACT

This study aimed to examine ethnoscience concepts in the *Gebug Ende Seraya* tradition in Patas Village, Gerokgak District, and to analyze its relevance to junior high school science materials. This research employed a descriptive qualitative method with an ethnoscience approach. The subjects were selected through purposive sampling and consisted of the village head, community leaders, and science teachers at SMP Negeri 5 Gerokgak. Data were collected through observation, interviews, documentation, and questionnaires. The data were analyzed descriptively to identify the equipment, implementation stages of the tradition, and the scientific concepts contained within it. The results showed that the main equipment used in the *Gebug Ende Seraya* tradition includes *penyalin* (a rattan beater) and *Ende* (a shield or self-protection tool). The implementation stages consist of the *matur piuning* procession, preparation of tools and costumes, and the main performance held every six months. The study found that this tradition contains local knowledge that can be reconstructed into scientific concepts, including sound vibrations and waves (the sound produced), heat and its transfer, classification of living things (natural resources from plant materials), measurement (dimensions of tools), pressure and rotational motion, temperature and heat, drying processes, and force and motion (activities of the players). These findings indicate a strong relationship between local scientific concepts and the Junior High School Science Learning Outcomes (CP) for Phase D, especially in the domains of force, motion, and energy, as well as supporting other elements such as matter and its changes. Therefore, this tradition has strong potential to be integrated as a contextual and meaningful learning resource for students.

Keywords: Ethnoscience, *Gebug Ende Seraya*, Scientific Concepts, Junior High School Science Learning.