

Puspitasari, Dewi. 2026. Analisis Literasi Sains Siswa Berbantuan Instrumen Soal Materi Ekologi Konteks Lorjuk (*Solen* sp.) Modung. Skripsi, Program Studi Pendidikan IPA, Jurusan Pendidikan, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunojoyo Madura.
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ABSTRAK

Rendahnya kemampuan literasi sains siswa serta masih terbatasnya penggunaan konteks lokal dalam instrumen pembelajaran IPA mendorong perlunya pemetaan kemampuan literasi sains siswa pada materi Ekologi. Penelitian ini bertujuan untuk memetakan kemampuan literasi sains siswa kelas VII pada materi Ekologi melalui instrumen soal essay berkonteks Lorjuk (*Solen* sp.) Modung. Penelitian menggunakan pendekatan deskriptif kuantitatif dengan desain survei deskriptif. Subjek penelitian berjumlah 116 siswa kelas VII yang dipilih dengan teknik purposive sampling. Data dikumpulkan melalui 10 butir soal essay yang mengacu pada tiga aspek kompetensi PISA 2025, yaitu menjelaskan fenomena secara ilmiah; menyusun dan mengevaluasi desain penyelidikan ilmiah serta menafsirkan data dan bukti ilmiah; serta menganalisis dan memanfaatkan informasi ilmiah dalam pengambilan keputusan. Hasil penelitian menunjukkan kemampuan literasi sains siswa secara keseluruhan berada pada kategori sangat rendah, dengan rata-rata 5,36 dan seluruh siswa (100%) berada pada kategori tersebut. Aspek menjelaskan fenomena ilmiah memperoleh rata-rata tertinggi (12,28), Menyusun dan mengevaluasi desain penyelidikan ilmiah memperoleh rata rata sebesar 2,48, sedangkan aspek menganalisis dan memanfaatkan informasi ilmiah memperoleh rata-rata terendah (0,43), menunjukkan siswa masih kesulitan menghubungkan konsep ilmiah dengan fenomena kontekstual di lingkungannya.

Kata kunci: literasi sains, instrumen soal, Ekologi, kearifan lokal, Lorjuk (*Solen* sp.)

Puspitasari, Dewi. 2026. Analysis of Students' Scientific Literacy Assisted by an Ecology Test Instrument in the Context of Lorjuk (*Solen* sp.) Modung. Undergraduate Thesis, Science Education Study Program, Department of Education, Faculty of Teacher Training and Education, Trunojoyo Madura University. Advisor: Eva Ari Wahyuni, Ph.D.

ABSTRACT

The low level of students' scientific literacy and the limited use of local contexts in science learning instruments have encouraged the need to map students' scientific literacy skills in Ecology. This study aims to map the scientific literacy abilities of seventh-grade students on Ecology material through an essay-based test instrument contextualized with Lorjuk (*Solen* sp.) Modung. The research employed a descriptive quantitative approach with a descriptive survey design. The research subjects consisted of 116 seventh-grade students selected through purposive sampling. Data were collected using 10 essay items based on three PISA 2025 competency aspects: explaining phenomena scientifically; designing and evaluating scientific inquiry as well as interpreting data and scientific evidence; and analyzing and utilizing scientific information in decision-making. The results showed that students' overall scientific literacy fell into the very low category, with an average score of 5.36 and all students (100%) were classified as very low. The aspect of explaining phenomena scientifically achieved the highest average (12.28), designing and evaluating scientific inquiry obtained an average of 2.48, while analyzing and utilizing scientific information yielded the lowest average (0.43), indicating that students still struggle to connect scientific concepts with contextual phenomena in their surrounding environment.

Keywords: scientific literacy, test instrument, Ecology, local wisdom, Lorjuk (*Solen* sp.)