

TINGKAT PERKEMBANGAN MORFOLOGI KARST FORMASI JONGGRANGAN DI KECAMATAN GIRIMULYO DAN KECAMATAN KALIGESING

Oleh:
Mu'arifin
03/167719/GE/05395

Intisari

Tujuan penelitian ini adalah mengkaji karakteristik geomorfologis Formasi Jonggrangan yang mencirikan keterdapatan topografi karst dan menganalisis perkembangan morfologi karst di Formasi Jonggrangan. Perkembangan morfologi karst yang dipelajari meliputi bentukan karst mayor dan bentukan karst minor.

Pengambilan sampel penelitian dilakukan secara purposif (*purposive sampling*). Sampel diambil berdasarkan bentukan karst yang terbentuk dilapangan dan aksesibilitas menuju lokasi sampel. Deskripsi perkembangan morfologi karst Formasi Jonggrangan ini menggunakan pendekatan analitik meliputi morfografi dan morfometri bentukan karst. Perkembangan karst ditentukan berdasarkan kriteria yang dibuat oleh Grund meliputi tahapan muda, tahapan dewasa, tahapan dewasa akhir, dan tahapan tua. Hasil yang diharapkan dari penelitian ini adalah deskripsi geomorfologis tentang keterdapatan topografi karst dan tingkat perkembangan morfologi karst Formasi Jonggrangan.

Hasil penelitian menunjukkan Daerah penelitian, yaitu Formasi Jonggrangan dapat diidentifikasi sebagai wilayah karst yang telah mengalami proses karstifikasi, ciri-ciri proses karstifikasi yang telah terjadi adalah terbentuknya bentukan-bentukan karst baik minor maupun mayor. Morfologi karst minor yang berkembang di daerah penelitian diwakili oleh *pits*, *shaft*, *clint*, dan *grike*. Morfologi karst mayor yang berkembang di daerah penelitian antara lain doline dan bukit karst. Perkembangan morfologi karst di Formasi Jonggrangan sangat dipengaruhi oleh faktor geologi, tektonisme, iklim dan relief daerah penelitian. Perkembangan morfologi karst daerah penelitian telah mencapai tahap dewasa. Ciri-ciri tahapan dewasa adalah sistem pergoaan telah terbentuk dan didominasi aliran bawah tanah, sedikitnya aliran permukaan karena aliran permukaan akan masuk ke dalam aliran bawah tanah melalui *swallow holes*.

Kata kunci: Formasi Jonggrangan, Morfologi karst, karstifikasi, perkembangan karst.



KARST MORPHOLOGY DEVELOPMENT LEVEL OF JONGGRANGAN FORMATION IN GIRIMULYO DISTRICT AND KALIGESING DISTRICT

BY:

Mu'arifin
03/167719/GE/05395

Abstract

The purpose of this research is to study geomorphologic characteristic from Jonggrangan formation. This study covered characteristic from karst topography that has been founded and to analyzed karst topography development in Jonggrangan Formation. Karst topography development that is studied covered major and minor of karst feature.

The sampling method that is used in this research was purposive sampling. The sample was taken based on karst feature that formed in field and accessibility to go to the sample. Description of the karst morphology development in Jonggrangan formation used analytic approach that covered karst morphography and morphometry. The development of karst is determined by criteria that was made by Grund that covered young karst, adolescent karst, mature karst, and old karst. The result that expected from this research was geomorphologic description about karst topographic existence and karst feature development level in Jonggrangan formation.

The result from this research showed that Jonggrangan formation can be identified as karst area that has been through karstification process. The characteristic of karstification process that had happened was the formed of the karst features, as major feature or minor feature. Minor karst morphology that developed in the research area was pits, shaft, clint, and grike. Major karst morphology that developed in the research area was doline and conical karst. The karst morphology development in Jonggrangan formation was very influenced by geologic factor, tectonics, climate and relief. Karst morphology development has reached adolescent karst. The characteristic from this stage was showed by the formed of cavement system, base flow domination, and lacked of overland flow because it was infiltrated to base flow through swallow holes.

Keywords: *Jonggrangan formation, karst morphology, karstification, karst development*