# ABSTRAK

Sungai Jali adalah sungai utama dari Sub DAS Jali. Sub DAS Jali ini terdapat di bagian hulu DAS Jali Cokroyasan. Sungai Jali akan mempunyai distribusi butir material dasar sungai tersendiri. Distribusi butir material dasar Sungai Jali akan dipengaruhi oleh karakteristik fisik Sungai Jali. Tujuan penelitian adalah 1) mengidentifikasi karakteristik fisik Sungai Jali dari hulu sampai hilir, 2) mempelajari morfometri butir material dasar Sungai Jali dari hulu sampai hilir.

Karakteristik fisik Sungai Jali didentifikasi melalui profil memanjang Sungai Jali dan penampang melintang Sungai Jali. Profil memanjang Sungai Jali dibuat dari hasil pengolahan data ketinggian pada Peta RBI. Penampang melintang dibuat dari hasil pengukuran morfologi sungai pada setiap titik sampel di lapangan. Morfometri butir material dasar mencakup hasil pengukuran Indeks Kebundaran Wadell dan Indeks Kepipihan Cailleux pada sampel material dasar Sungai Jali. Sampel material dasar Sungai Jali diambil pada 20 titik sampel. Titik Sampel tersebar tersebar dari hulu sampai hilir Sungai Jali. Setiap titik sampel diambil 100 butir material dasar sungai.

Hasil dari penelitian adalah 1) profil memanjang Sungai Jali menunjukkan penurunan ketinggian dari hulu sampai hilir dan penampang melintang Sungai Jali mempunyai distribusi spasial yang semakin melebar ukurannya menuju hilir. 2) Nilai indeks kebundaran butir material dasar Sungai Jali memiliki kecenderungan semakin naik menuju hilir dan nilai indeks kepipihan butir material dasar Sungai Jali juga memiliki kecenderungan yang semakin naik menuju hilir. Kecenderungan kebundaran dan kepipihan butir material dasar Sungai Jali tersebut dikontrol oleh bentuk awal batuan dan proses transportasi dari hulu ke hilir.

**Kata Kunci**: Sungai Jali, material dasar sungai, kebundaran butir, kepipihan butir

# ABSTRACT

*Jali River is the main river of the Jali Sub-Watershed. Jali Sub-Watershed is located on the Upstream Watershed Jali Cokroyasan. The Grain of the riverbed material in Jali River is going to be distributed by itself. The Grain distribution of the riverbed material in Jali River will be affected by the physical characteristics of the Jali River. The purposes of the research are 1) to identify the physical characteristics of Jali River from upstream to downstream, 2) to study the grain morphometry of the riverbed material in Jali River from upstream to downstream.*

*The physical characteristic of the Jali River is identified by the longitudinal profile and cross-sectional of the river. The longitudinal profile of Jali River is created through the data processing of the elevation based on the RBI map. The cross section is created based on the results of the measurements of the river morphology from each sample's points in the field. The grain morphometry of the riverbed material in Jali River is including the results of the measurement of Wadell Roundness Index and Cailleux Flatness Index of the riverbed material samples of Jali River. The riverbed material of Jali River was taken as samples from 20 sampling points. The Sampling points are spread over along the river from upstream to downstream of Jali River. Every sample points were taken as much as 100 grains of the riverbed material.*

*The Results of the study are 1) the longitudinal profile of Jali River shows the decreasing altitude from upstream to downstream and the cross-sectional of Jali River has a spatial distribution that shows increasing wide toward the downstream. 2) The value of the grain roundness index of the riverbed material in Jali River has tendency to increase towards the downstream and the value of the grain flatness index of the riverbed material in Jali River has tendency to increase towards the downstream. Tendency of the grain roundness and the grain flatness of the riverbed material in Jali River is controlled by early form of rock and transport process from upstream to downstream.*

***Key Word**: Jali River, riverbed material, grain roundness, grain flatness*