2018 Master's Thesis

Study on Seed Supply and Initial Vegetation Establishment Process on Bare Sandbar

裸地砂州における種子供給と植生初期定着過程に関する研究

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ABSTRACT

From the view point of flood control and conservation of river ecosystem, it is important to grasp vegetation recruitment process of the first stage of the extreme growth of riparian vegetation. The periodically investigation of seedbank distribution on bare sandbar and observation of vegetation coverage condition on bare sandbars using UAV were conducted to clarify the seed supply and initial vegetation establishment process. The results of the observation have revealed that the target sandbar has topographic features, and large amount of soil seedbank was accumulated behind dunes compared with the shoreline and flat area. The establishment zone was developed along the shoreline. Thus, it was suggested that the initial vegetation establishment was not determined only by the seed supply condition but also further environmental conditions.

要　旨

近年河道内の樹林化が多く見られ，その原因や進行過程の解明は喫緊の課題となっている．本研究では河川植生の植生動態の初期段階に着目し，裸地砂州における定期的な埋土種子調査と植被状況の観測を行った．結果，種子は砂堆背後に堆積しやすいこと，細砂含有率が高いことが明らかにされた．また，植生定着域の多くが水際付近で確認されたことより，種子供給量の大小が必ずしも植生定着域を決定するわけでなく，種子供給過程から植生定着過程に至るには土壌水分条件など独立した環境条件が必要となることが示唆された．