飯舘村における脱炭素・循環型農業の研究 1-
遮へい土における窒素および炭素循環

Study on Decarbonization and Recycling-Oriented Agriculture in Iitate Village 1 –
Nitrogen and carbon cycle in shaded soil

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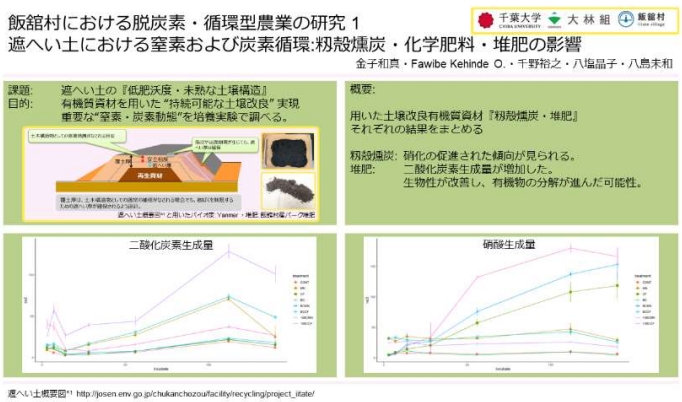
キーワード：土壌改良，籾殻燻炭，堆肥
Keyword：Soil improvement, Rice husk biochar, Manure

現在飯舘村長泥地区で行われている再生利用実証事業に用いられた遮へい土は構造未発達や肥沃度不足の課題がある。そこで本研究では有機質資材籾殻燻炭・堆肥を用い、覆土の土壌改良と脱炭素・循環型農業の両立を培養実験で調査した。籾殻燻炭を入れた結果、施肥量に比例して硝化の促進される傾向が見られた。堆肥と籾殻燻炭同時に施肥した区では有意に二酸化炭素生成量が増加し、生物性の改善が起きたと考察する。

The shielding soil used in the recycling demonstration project currently underway in the Nagadoro area of Iitate Village has issues of underdeveloped structure and insufficient fertility. Therefore, this study investigated the compatibility of soil improvement and decarbonization/recycling agriculture by using organic materials, rice husk smoked charcoal and compost, in a culture experiment. The results showed that nitrification tended to increase in proportion to the amount of fertilizer applied. The amount of carbon dioxide production increased significantly in the area where compost and rice husk smoked charcoal were applied at the same time, suggesting that the biological properties of the soil were improved.



実験概要の説明・二酸化炭素と硝酸生成量