Metadata Records

Irrigation Innovation Consortium-Supported Project Datasets

Please use a separate sheet for each dataset. Answers are automatically saved. Questions? Contact Diane DeJong: diane.de\_jong@colostate.edu.

Thank you!

Question	Your answer
Project name	Closing the loop on sustainable plasticulture
Project background	The Irrigation Industry manufactures approximately 250 million lbs. of plastic drip tubes, tapes, and emitter lines in the USA alone. Some of these products will be utilized in fields or landscapes for a long time (10-30 years), while other products, such as thin-mil drip tapes, are only used for one crop growing cycle (4 months). It is estimated that a small percent of these products are recycled. Much of the un-recycled and even "recycled" plastic drip products may end up in landfills or other non-renewable waste streams. We propose to investigate the technical and economic feasibility of using recycled thin-walled single-use drip tape as source material for thick-walled long-life drip tubing.
Dataset name	Lab testing of thick-walled drip tubing manufactured from recycled plastic
Primary author Include first & last name, institution affiliation, and email address. Primary contact The primary contact may be the same or different from the primary author.	Charles Hillyer, Center for Irrigation Technology, California State University - Fresno, hillyer@mail.fresnostate.edu Charles Hillyer, Center for Irrigation Technology, California State University - Fresno, hillyer@mail.fresnostate.edu
Include first & last name, institution affiliation, and email address. <b>Dataset description</b> Please provide a brief, clear summary description of the dataset contents. Indicate as applicable: purpose and scope; time period; areas of investigation; and any other special characteristics.	The Center for Irrigation Technology conducted a series of performance tests on the thick-walled driplines. In the interest of simplicity and expediency, the tubing was fabricated for on-line (rather than inline) emitters. This decision was justified because a) the emitters that would have been used have already been tested and their performance would not be affected by the tubing and b) the long-term test would be more practical if the emitter selection and spacing could be handled by the Viticulture Department. The original testing plan called for emitter uniformity, discharge, and plugging tests. These tests were not conducted.
Spatial coverage Please be specific as possible about the geographic coverage of your data, and record the information according to defined standards, such as FGDC or the Getty Thesaurus of Geographic Names. You can enter lat/long data, county names, state names, etc.	Center for Irrigation Technology 36°48'54.7"N 119°44'02.9"W
<b>Temporal coverage</b> Describe the temporal coverage of your dataset: Start: Time of day, Date, Month, Year Finish: Time of day, Date, Month Year	2023

Re-use limitations	None
Describe known problems or caveats that would limit reuse of the data (e.g., uncertainty,	
sampling problems, blanks, quality control samples) and/or that future potential users of	
your dataset should know about. Or indicate "None."	
Citations	None
Please include full citations and DOIs for articles published based on or related to this	
dataset. Or indicate "None."	
Keywords	recycled plastic; drip irrigation; economic feasibility; plasticulture
Please add a few appropriate National Agricultural Library keywords:	
https://agclass.nal.usda.gov/vocabularies/nalt	
Tags	drip tube; drip tape; recycled resin;
Please add a few of your own user-defined tags that would be useful to others who might	
use your dataset in the future.	
Acronyms & abbreviations	CIT: Center for Irrigation Technologuy
Please define any acronyms, site abbreviations, or other project specific designations used in	
your dataset. Or indicate "none."	
Other dataset storage location	No
Has this dataset already been uploaded elsewhere? Yes or No	
Reasons may include a requirement as part of publishing a paper or storing data on GitHub	
or other locations to make accessible to others.	
If yes, please provide the link or other information to explain where the dataset is located	
and where or how it can be accessed.	