

NEWS RELEASE Jan. 7, 2025

COLORADO'S INSTITUTE OF CANNABIS RESEARCH PRODUCES NEW STRAIN OF CANNABIS, PINK PEPPER, AND SEQUENCES THE MOST COMPLETE CANNABIS GENOME EVER.

(Pueblo, CO) — The Institute of Cannabis Research (ICR) at Colorado State University Pueblo announced the completion of the whole genome sequence of a new CBD-rich strain of cannabis, named Pink Pepper. The *Cannabis sativa* L. variety is named 'Pink Pepper' because of its unique and striking coloration. The plant was developed by Professor Jung Dae Lim and his colleagues in several departments at Kangwon National University — Chuncheon South Korea. The ICR collaborated with Professor Lim's team to assemble the whole genome sequence. The collaboration also included researchers from the Korean National Academy of Agricultural Sciences, and the Chuncheon Bioindustry Foundation. The sequence of 770 million DNA base pairs represents the most complete cannabis genome in the world.

"Pink Pepper, a new CBD-rich variety, features a fully sequenced genome, serving as an invaluable resource for cannabis breeding, CBD production, and understanding the genetic regulation of key agricultural traits, including cannabinoid and terpene production," said Dr. Sang Park, the Lead Plant Molecular Scientist for the ICR. "This pioneering variety sets a new benchmark for cannabis genetics and genomics, offering a vital reference for studying cannabis evolution and driving advancements in genomic research."

Pink Pepper, named for its unique and striking coloration, will provide a foundational resource for breeding, genetic improvement, and research into cannabinoid and terpene biosynthesis. Having a comprehensive genome map is a valuable tool for researchers in the understanding of cannabinoid synthesis pathways. By providing these insights, this work offering the potential for enhanced therapeutic effectiveness through precise control of cannabinoid biosynthesis.

The newly developed strain boasts high productivity and quality consistency that meets pharmaceutical-grade standards. The partnership achieved a remarkable 99.6% assembly accuracy with Pink Pepper,

making it one of the most complete genome analyses to date. It has been designated as a reference

genome by the National Center for Biotechnology Information (NCBI).

"This is truly groundbreaking work," said Chad Kinney, Executive Director of the ICR. "This new Cannabis

variety represents a significant advancement in cannabis genomics, and sets a new standard for gaining

insights and driving new advancements in cannabinoid research, primarily for medicinal uses.

###

About the ICR

The Institute of Cannabis Research (ICR) was created in 2019 by Colorado Statute and is funded by the

State of Colorado through the Marijuana Cash Tax Fund. The mission of the ICR is to conduct and fund

unbiased research related to cannabis, for the benefit of Colorado residents. More information about

the ICR can be found at

https://www.instituteofcannabisresearchcolorado.com.

Contact:

Kyle Blakely

719-439-4890

kyle@blakelycompany.com