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A novel herbicide from Bayer is submitted for registration in four major markets

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Bayer advances its innovative herbicide pipeline by submitting registration applications for icafolin-methyl in the European Union, following earlier submissions in Brazil, the United States, and Canada. Icafolin represents the first new mode of action for post-emergent weed control in broadacre crops in over three decades. With an estimated peak sales potential of â?¬750 million, Bayer anticipates launching Icafolin from 2028, starting in Brazil. The companyâ??s new DSO operating model has played a crucial role in accelerating regulatory submissions for this groundbreaking product.

Icafolin represents a new chemical class with unique properties that enable lower dose rates and more precise applications. It is anticipated to have an exceptional safety and sustainability profile. Additionally, Icafolin complements existing herbicides, such as glyphosate, providing a valuable solution to combat weed resistanceâ??a critical concern for farmers. The rise of weed resistance globally poses a significant threat to food security, as resistant weeds compete with crops for sunlight and nutrients, reducing yields and harvest quality.

â??Weeds threaten food security and farmer livelihoods, which is why investing in game-changing innovations like Icafolin is so vitally important,â?• said Mike Graham, Head of Research & Development for the Crop Science division of Bayer. â??Access to an entirely new herbicide class that complements the existing toolbox not only helps farmers combat and prevent weed resistance, but it also helps farmers adopt and maintain no-till and reduced tillage practices that improve soil health, which is a cornerstone of regenerative agriculture.â?•

Icafolin has been developed for initial uses in soybean, cereals, pulses, and oil seed crops, as well as pome and stone fruits, tree nuts, grapes, and citrus. As a novel mode of action, it has unique properties and benefits. Treated weeds become â??frozenâ?• in the fields, meaning they stop competing with crops for water, nutrients and sunlight, but the dead weeds remain in the field longer because they largely maintain their structure. This creates a mulch layer that helps prevent erosion

and trap moisture in the soil. By providing effective weed control it reduces the need for tillage, supporting regenerative practices in agriculture that can improve soil health.

Additionally, Icafolin's intrinsic properties make it suitable for targeted spray applications and lower dose rates, which allowed Bayer to submit registration applications under reduced risk status. Icafolin is the first product to utilize CropKey, Bayerâ??s breakthrough R&D approach to developing new crop protection products, which optimized the formulation recipe by considering multiple dimensions including efficacy, safety and sustainability criteria, and farmer convenience. CropKey will continue to accelerate how researchers design instead of screen for new molecules, supporting faster development of future products targeting specific proteins in weeds, pests, and crop diseases.

â??With CropKey we're not just responding to current agricultural challenges more quickly, we're being proactive and anticipating future needs,â?• said Rachel Rama, Senior Vice President and Head of Small Molecules at Bayer's Crop Science division. â??Leveraging artificial intelligence greatly accelerates our journey from concept to market, so farmers gain access to the most effective and environmentally responsible crop protection products.â?•

Following the first expected launch from 2028 onward in Brazil, Bayer anticipates selling Icafolin in the U.S, Canada, EU and other geographies over subsequent years.