

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): March 07, 2023**

**GreenLight Biosciences Holdings, PBC**

(Exact name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-39894**  
(Commission File Number)

**85-1914700**  
(IRS Employer  
Identification No.)

**200 Boston Avenue  
Suite 3100  
Medford, Massachusetts**  
(Address of Principal Executive Offices)

**02155**  
(Zip Code)

**Registrant's Telephone Number, Including Area Code: (617) 616-8188**

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Securities registered pursuant to Section 12(b) of the Act:**

<b>Title of each class</b>	<b>Trading Symbol(s)</b>	<b>Name of each exchange on which registered</b>
Common stock, par value \$0.0001 per share	GRNA	The Nasdaq Stock Market LLC
Warrants, each exercisable for one share of Common Stock for \$11.50 per share	GRNAW	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

## Item 7.01 Regulation FD Disclosure

On March 7, 2023, GreenLight Biosciences Holdings, PBC (the “Company” or “GreenLight”) issued a press release entitled “GreenLight Biosciences Outlines Development Strategy and Highlights Portfolio Updates at Plant Health R&D Day.” The Company will present business updates on a webcast on March 7, 2023 at 10:30 a.m. ET. A copy of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and the presentation can be found on the Company’s website at <https://investors.greenlightbio.com/events-presentations/presentations>.

The information in this Item 7.01, including Exhibit 99.1 to this Current Report on Form 8-K, the presentation referenced above and the other content on our website, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such a filing.

## Item 8.01 Other Events

On March 7, 2023, the Company is hosting a research and development day to outline its pipeline strategy and R&D progress for dsRNA-based crop protection and plant delivery innovations focused on addressing food security with innovative and sustainable, solutions.

GreenLight has advanced its portfolio strategy, target product profiles and delivery capabilities in a number of ways it will discuss as part of the R&D day. GreenLight intends to use, and has taken steps to use, its platform to expand its market access by progressing its product development from generation 1, high-value crops (e.g. single target solutions designed to demonstrate proof-of-concept for dsRNA-based agricultural solutions intended to be primarily registered and commercialized by GreenLight), to generation 2, multitarget products (e.g. solutions designed to address multiple targets, anticipated to be developed in collaboration with partners that possess significant distribution capabilities for large markets and retained in house for high value), to generation 3, systemic delivery capabilities (e.g. solutions delivered to the plant to target weeds, nematodes or improve nutrition; intended primarily to be developed in partnership with crop fertility and other potential partners).

Progress updates in GreenLight’s plant health pipeline are as follows:

### Generation 1: High-Value Crops

Calantha™: Subject to receiving regulatory approval and applicable state registrations in the US, we anticipate and are in active preparations for commercial launch prior to the end of 2023. As part of this effort, we are in active discussions with territory-relevant distributors across the US as potential partners to support our planned commercial launch. Furthermore, we are planning to submit Calantha™ for regulatory approval in the EU, UK, Mexico, Canada and Ukraine.

Varroa mite solution: In February 2023, GreenLight submitted a registration dossier to the EPA for our RNA solution that targets the varroa destructor mite, which threatens the role of honeybees in pollinating more than 100 crops annually. We are also planning to submit this solution for regulatory approval in Canada, New Zealand, the EU, and UK, with other potential territories under consideration. As previously described, our field trial data has shown that there are ~40% fewer Varroa destructor mites at 12 weeks in hives compared with a leading chemical control product and with higher hive survival rates compared to the chemical control. Through our ongoing mode of action studies with Victoria University of Wellington (NZ), data shows that the average number of mite offspring decreased approximately 95% compared to control with no detectable negative impact on the growth and development of juvenile bees. Furthermore, our 2022 trials showed that our varroa mite solution used in spring and fall will more than double the rate of hive survival compared to not treating for varroa mite.

### Generation 2: Multitarget Solutions

GreenLight is expanding certain dsRNA-based fungal, insecticide, and acaricide programs into solutions that are designed to address multiple targets.

Powdery Mildew (“PM”): A complex of diseases that impacts a wide range of crops and plants consisting of multiple species that are slightly genetically diverse. GreenLight has further developed its powdery mildew solution by modifying our lead sequence to enable potential control of multiple targets (i.e. cucurbits PM, cereal PM, and ornamentals PM in addition to original target of vine PM). Our field trials have demonstrated that sprayed unformulated (naked) dsRNA decreases disease severity in grapes and performed similarly to the biological standard in field trials. In a similar field trial on zucchini, data showed that our naked dsRNA sequences performed well but inferior to field trial standards. However, when formulated with adjuvants, our trial results showed that our formulated dsRNA provided a larger reduction in disease severity compared to the industry standard. We are targeting our first regulatory submission of our powdery mildew program in 2024 in the US.

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Grey Mold: Disease that impacts a wide range of crops and plants. GreenLight has modified its lead sequences to add additional target species (i.e. sclerotinia sclerotiorum in addition to original target of botrytis cinerea). Data from recent field trials show that dsRNA can provide multi-species control with commercially relevant spray intervals and naked dsRNA applied on snap beans performed similar to the chemical standard. We are targeting our first regulatory submission of our powdery mildew program for 2025.

### Generation 3: Systemic Delivery

Through data from field trial studies conducted at the end of 2022, GreenLight has demonstrated stability of RNA through a standard seed treatment process and dsRNA delivery into plants, showing decreased fusarium disease severity in lettuce seed treatment field trials across two locations and three lettuce varieties. Additionally, data from early experiments (n+2) conducted in February 2023 showed very preliminary indications of herbicidal activity.

### **Forward-Looking Statements**

Certain statements in this Current Report on Form 8-K may constitute “forward-looking statements” for purposes of the federal securities laws. Our forward-looking statements include, but are not limited to, statements regarding our or our management team’s expectations, hopes, beliefs, intentions or strategies regarding the future, including those relating to the success, cost and timing of our research and development activities in our plant and human health programs, the timing of regulatory submissions and approvals, our ability to commercialize our products, the acceptance of RNA-based technologies by regulators and the public, our ability to raise and productively deploy capital and the rate at which we can successfully bring products to market, our projected cash runway and our ability to obtain funding for our operations when needed. Forward-looking statements include statements relating to our management team’s expectations, hopes, beliefs, intentions or strategies regarding the future. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intends,” “may,” “might,” “plan,” “possible,” “potential,” “predict,” “project,” “should,” “will,” “would” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. These forward-looking statements are based on current expectations and beliefs concerning future developments and their potential effects. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described under the heading “Risk Factors” in the Company’s most recent Annual Report on Form 10-K filed with the SEC, as well as discussions of potential risks, uncertainties, and other important factors included in our Quarterly Reports on Form 10-Q, periodic filings on Form 8-K, and any of our future filings with the SEC. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Some of these risks and uncertainties may in the future be amplified by current macroeconomic conditions and the ongoing COVID-19 pandemic and there may be additional risks that we consider immaterial, or which are unknown. It is not possible to predict or identify all such risks. Our forward-looking statements only speak as of the date they are made, and we do not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

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## Item 9.01 Financial Statements and Exhibits

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	<a href="#">Press Release issued by GreenLight Biosciences Holdings, PBC on March 7, 2023</a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

GREENLIGHT BIOSCIENCES HOLDINGS, PBC

Date: March 7, 2023

By: /s/ David Kennedy

David Kennedy  
General Counsel

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## GreenLight Biosciences Outlines Development Strategy and Highlights Portfolio Updates at Plant Health R&D Day

**BOSTON, March 7, 2023** — GreenLight Biosciences (Nasdaq: GRNA), a public benefit corporation striving to deliver on the full potential of RNA to address some of the world's toughest problems in human health and agriculture, will today outline its pipeline strategy and R&D progress for dsRNA based crop protection and plant delivery innovations focused on addressing food security with innovative and sustainable solutions during its Plant Health R&D Day being held today, March 7<sup>th</sup>, 2023 at 10:30 a.m. ET in Research Triangle, North Carolina.

“GreenLight is taking an innovative approach to advancing novel double-stranded RNA (dsRNA) solutions for numerous agricultural applications with advantages in speed of discovery/development, cost, quality and delivery. We have advanced our company's portfolio strategy, target product profiles, and delivery capability all to meet the global challenges we face in the quest to grow food sustainably.” said Andrey Zarur, CEO of GreenLight Biosciences. “We have done this all with an eye on expanding potential addressable markets for our product portfolio and a focus on the potential benefits that our sustainable technologies could have on society.”

### **Sustainable innovations that address emerging resistance, food security, and agricultural impacts on biodiversity**

As a leader in RNA innovation for agriculture, the Company is building on its existing rapid design, development and iteration capabilities for dsRNA by expanding product applications and delivery capabilities. The technological progress to be shared in today's showcase enables GreenLight Biosciences to work towards unlocking access to the broader global insecticides and fungicides market worth \$39B<sup>1,2</sup>, and the global herbicides market valued at \$35.72B<sup>3</sup>.

“Farmers need products that appropriately solve the challenges they face in-field, all while helping to improve the overall sustainability of agriculture,” said Mark Singleton, Chief Commercial Officer and General Manager of Plant Health. “GreenLight Biosciences is fully committed to delivering products that address some of the major challenges faced by farmers, such as increased pest resistance, tightening regulatory environments, and demands by consumers to reduce chemical loads in foods. We expect that our rapid dsRNA development and production capabilities, coupled with novel delivery technologies, will enable us to develop sustainable solutions across all crop inputs segments and help reduce agricultural impact on biodiversity.”

### **Plant Health Strategy & Portfolio Updates**

Today, at GreenLight's R&D Showcase, the Company will outline a long-term strategy to progress its Plant Health portfolio and highlight progress in its R&D pipeline that it anticipates will help farmers expand their suite of tools to preserve yield potential as threats from insects, disease, and weeds increase, including:

- Actively preparing for commercial launch prior to end of 2023 of our leading dsRNA solution, Calantha™, subject to regulatory approval
- The registration dossier for our RNA solution that targets the varroa destructor mite was submitted to the EPA in February 2023 and is now under review
- Expansion of dsRNA-based fungal, insecticide, and acaricide programs into multi-target applications
- Plant disease program data showing formulated dsRNA performance in-field providing control of grey mold and powdery mildew equivalent or better than conventional chemical standards at commercially relevant spray intervals
- Data demonstrating functional delivery of dsRNA into plants; showing decreased fusarium disease severity in lettuce seed treatment trials, and preliminary indications of herbicidal activity

“These highlights are representative of our robust dsRNA pipeline, delivery capability and our ongoing commitment to delivering on the potential of RNA to provide farmers with the tools they need to increase productivity, profitability, and sustainability in the face of climate events and increasing resistance to conventional crop protection products,” said Zarur. “We look forward to advancing these innovations to ensure that farmers have access to technology that benefits their production, and to help create healthy people and planet through RNA innovation.”

The Plant Health R&D Day is the first in a series providing comprehensive updates on GreenLight's R&D strategy and progress. The next session will focus on the Company's Human Health portfolio and will be hosted on Thursday, March 9<sup>th</sup>, 2023, at GreenLight Biosciences Headquarters in Lexington, MA.

A webcast of both events will be available live and can be accessed via the Investors section of the Company's website at [www.greenlightbiosciences.com](http://www.greenlightbiosciences.com). Registration is available here: <https://www.greenlightbiosciences.com/rdshowcase/> and a replay of the webcasts will be available at <https://investors.greenlightbio.com> for approximately 30 days.

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**Sources:** 1. <https://www.marketsandmarkets.com/Market-Reports/fungicides-356.html> 2. <https://www.marketsandmarkets.com/Market-Reports/insecticide-market-142427569.html> 3. <https://www.businesswire.com/news/home/20210916005897/en/Global-47.09-Bn-Herbicides-Market-to-2025-2030---ResearchAndMarkets.com>

### **About GreenLight Biosciences**

GreenLight Biosciences (Nasdaq: GRNA) aims to address some of the world's biggest problems by delivering on the full potential of RNA for human health and agriculture. Our RNA platform allows us to research, design, and manufacture for human, animal, and plant health. In human health, this includes messenger RNA vaccines and therapeutics. In agriculture, this includes RNA to protect honeybees and a range of crops. The Company's platform is protected by numerous patents. GreenLight's human health product candidates are in the pre-clinical stage, and its product candidates for the agriculture market are in the early stages of development or regulatory review.

### **Availability of Other Information About GreenLight Biosciences**

Investors and others should note that we communicate with our investors and the public using our website ([www.greenlightbiosciences.com](http://www.greenlightbiosciences.com)), the investor relations website (<https://investors.greenlightbio.com/>), and on social media (Twitter and LinkedIn), including but not limited to investor presentations and investor fact sheets, U.S. Securities and Exchange Commission filings, press releases, public conference calls and webcasts. The information that GreenLight posts on these channels and websites could be deemed to be material information. As a result, GreenLight encourages investors, the media, and others interested in GreenLight to review the information that is posted on these channels, including the investor relations website, on a regular basis. This list of channels may be updated from time to time on GreenLight's investor relations website and may include additional social media channels. The contents of GreenLight's website or these channels, or any other website that may be accessed from its website or these channels, shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

### **Forward Looking Statements**

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### **Contacts:**

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**Investor Contact:**

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