

To Meet Climate & EJ Goals, Scoping Plan Must Include Synthetic Pesticide Reductions

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Californians for Pesticide Reform
Sarah Aird & Jane Sellen

Scoping Plan Must Include Synthetic Pesticide Reductions

- Synthetic pesticides contribute to GHG emissions both directly and indirectly
- Synthetic pesticide use is an environmental injustice in California
- Organic farming, nearly entirely free of synthetic pesticides and synthetic fertilizers, and ecological pest management are proven solutions that Scoping Plan should support

Synthetic Pesticide Use in California

- Approximately 200 million pounds, or 20% of all pesticides in the U.S., are used in California each year
- Pesticides are applied on cropland in California at a rate 4.5 times higher than the national average

If not addressed now, synthetic pesticide use in California will likely increase due to climate change

- Research shows that under the status quo climate change will likely result in increased synthetic pesticide use due to increased pest pressure and decreased efficacy of pesticides
- Important that CARB has incorporated increased organic farming in natural and working lands modeling scenarios; should appear in every scenario
- Apart from the organic farming modeling, the current Scoping Plan is set to support practices that will almost certainly result in increased pesticide use unless pesticide reduction is actively incentivized
- Without incorporating pesticide reduction, CARB will likely incentivize management practices that lead to increased herbicide dependence in conventional systems and will fail its mandate in AB 32, 38562 (b)(2) to “Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities”

Synthetic Pesticides Cause Climate Impacts at Every Stage of Their Life Cycle



Inclusion, to date, of only 2 Pesticide Active Ingredients in Scoping Plan

- To date CARB has identified only 2 pesticides that contribute to GHG emissions:
 - methyl bromide
 - sulfuryl fluoride - short-lived climate pollutant
 - Identifying them is not enough; there must be measures to address them
- 2022 Scoping Plan must identify and include measures to address more than just 2 of the 1,066 pesticides registered in California

Synthetic Pesticides' *Direct* Contributions to GHG Emissions Justify Greater Inclusion of Pesticides in Scoping Plan

- Existing research should inspire life cycle analyses *and* pesticide reductions now
- Focus on fumigants:
 - Approximately 40 million pounds of fumigants are applied in CA each year
 - All fumigants are Toxic Air Contaminants
 - Fumigants contribute to Volatile Organic Compound (VOC) emissions, leading to formation of tropospheric ozone (O_3) the 3rd most important GHG after carbon dioxide and methane, and a serious threat to human health
 - Applications of 3 fumigant pesticides heavily used in California (~20 million pounds/year) result in significant increases in nitrous oxide (N_2O) emissions

Synthetic Pesticides' *Indirect* Contributions to GHG Emissions Justify Greater Inclusion of Pesticides in Scoping Plan

- Use of synthetic pesticides impairs the ability of soils to sequester carbon, especially stable carbon
 - Synthetic pesticide use harms soil invertebrates
 - Synthetic pesticide use reduces soil microbial activity
- Synthetic fertilizer use increases as a result of synthetic pesticide use



Include Synthetic Pesticides in 2022 Scoping
Plan to Protect the Climate and Public Health
and Honor Environmental Justice
Commitments

Questions? Comments?

- Jane Sellen, CPR Co-Director, jane@pesticidereform.org
- Sarah Aird, CPR Co-Director, sarah@pesticidereform.org