

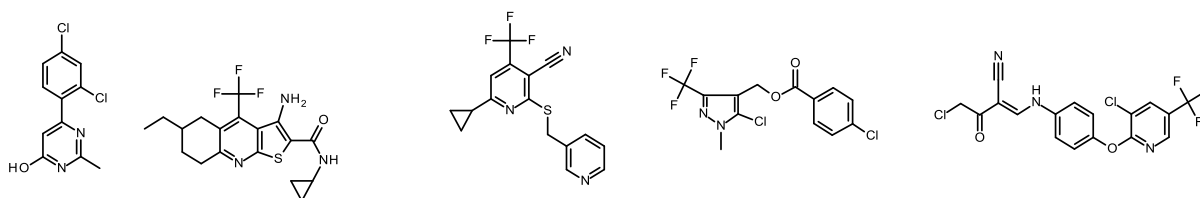
The BIONET Herbicide Focused Screening Library.

A set of simple criteria have been derived that can guide screening-compound purchase towards compounds that are more likely to have post-emergence herbicidal activity [1]. Key Organics have combined these simple rules with a MW and cLogP range designed to confer Leadlike properties. We have also taken into consideration frequency of occurrence of a number of Functional Groups in Herbicides [1] and excluded those with low frequency (alcohol, amine, aldehyde, thiophene, imidazole, sulphonamide) and engineered a high prevalence of functional groups that are common in insecticide (carboxamide, pyridine, pyrimidine, benzene, ester, sulphonamide, aromatic and non aromatic heterocycles) to produce a screening library with physiochemical properties suitable for Agrochemical screening applications.

The BIONET Herbicide Focused Screening Library characteristics are listed in the table below:

Physiochemical Property	Herbicidal Criteria
H-bond donors	≤3
H-bond acceptors	≥2 and ≤12
MW	220 - 435
Rotatable bonds	≤ 12
CLogP	≤ 4.5
PSA	≥22 and ≤129
Purity	≥ 90%

The BIONET Herbicide Focused Screening Library is available custom-weighted in milligram or micromolar quantities. Customers can purchase the entire library or select any number of compounds as required.



[1] Tice, M C. *Pest Manag Sci* 57:3-16 (2001)