

Source file:

REPORT.md

Source SHA-256:

29a0841ea9f90a7edf074304562057af1450705cb8401bab505002332518a785

Publication note:

Verify the current product label and local requirements before use.

PestController.org Chemical Knowledge Accuracy Audit

Evidence cutoff: 2026-08-08, America/Chicago.

Status: chemical-knowledge v1.2.1 was built at 2026-08-08T00:00:00Z. It is an auditable, fail-closed evidence release: regulated facts remain blocked unless their exact identity, current reviewed Label path, accepted anchor, and publication gate are satisfied. [S01][S02]

Safety notice: this report describes evidence and publication controls. It is not pesticide-use direction. The current product-in-hand label and applicable law control use; an SDS supplies hazard and handling context but does not authorize a pesticide use. [S08]

Executive summary

The v1.2.1 package contains 148 page-linked candidate regulated facts, all blocked, and 44 retained disagreements, none published. Its article universe contains 467 immutable-origin candidates in four separate lanes: 136 professional-product candidates, 114 scope exclusions, 100 expansion-research candidates, and 117 professional-topic candidates. [S01][S02][S04]

The current editorial states are 253 blocked, 114 excluded, 100 research-only, and zero ready for draft. Readiness is 0 for 451 rows and 40 for 16 rows; no row is ready. [S03]

The normalized research layer has 23 techniques, 18 IPM methods, 16 nonchemical-IPM actions, 22 equipment records, 227 source-detail records, and 449 typed claims. Those

claims remain research-only and non-authorizing. [S02]

The package binds the following release identities:

Artifact	SHA-256
v1.2.1 SQLite	91cb8b86231cec6f738d7f33dce4c1015fb7e9d344e039c3e16b0d2ee7e6da7d
v1.2.1 editorial backlog CSV	72031b49802e7b7e4ae2afda451490e4d58619842960d8a7f6ec20d8e1d9d84c
v1.2.1 article universe CSV	bc4e533d10492efd6e6de558c636d9f0ffccb2b0742362fb295636e5dca0cc09
v1.2.1 package manifest	61ba3d0857229cb117d0393937ae97b4fdf1ede1ade0eec100d817bddcd3823c
v1.2.1 QA record	90a7bd68020ca1f30304e8b3d36c34b09571300c7bcd9b017098900ae7ed0c0
v1.2.1 unresolved annex	2ba60336a004ae122429d2db0ed2c8a3f8d4a0be50cb9e1db80b2a3d3e9792d2
G020 red-team findings	50aeb84e34dfca7bce538885209d7991cf197a0e4e73e00f5cea62e432f2d278

The companion `REPORT.manifest.json` binds this Markdown source to the delivered HTML, tagged/searchable Letter PDF, and structurally real DOCX after rendering. [S09]

Scope/corpus/ranking caveats

The binding scope is United States professional structural pest control, with adjacent technique, nonchemical IPM, and professional-equipment research. Consumer discussion can suggest questions and recurring experiences, but consumer-only products do not enter the professional publication set. [S08]

The top-250 input is a research lead set, not a validated professional catalog. Its scope decomposition is 136 professional PCO candidates, 71 consumer-only rows, 35 non-structural rows, and 8 municipal/vector rows. Scope eligibility is not accepted identity, current-document coverage, or human review. [S03][S04]

Ranks 1 through 250 use a `/14` proxy, while ranks 251 through 350 use a `/100` research score. Their populations and score methods remain separate; raw scores are not merged across lanes. [S02][S03]

The v1.2.1 catalog snapshot contains 2,149 products, while the evidence package models 349 distinct ranked subjects. A snapshot-local product integer is provenance, not stable identity. [S01][S02]

Product identity/document coverage

Names, manufacturers, active ingredients, registration bases, filenames, and folder proximity are candidate signals. None alone establishes an exact current marketed identity. [S08]

The package contains 3,354 physical SHA-256 documents, 3,414 document paths, 3,493 product-document bindings, and 34,770 stored pages. It has four accepted document-review records. Classification, exact-product binding, currentness, and human review remain separate checks. [S01][S02]

Every regulated fact retains document identity, source SHA-256, page, short anchor, identity state, role state, currentness state, disagreement state, scope state, and publication state. A fact cannot be public merely because an associated document exists. [S01][S02]

The package publishes no regulated fact. Missing, stale, unreviewed, conflicting, or out-of-scope evidence remains blocked rather than inferred. [S02]

Citation/evidence-quality coverage

Public evidence is deliberately narrow: it uses exact source identity, page locators, short attributed anchors, and publication gates rather than full third-party document text. [S08]

A Label can support use information only for its exact reviewed identity and version. An SDS cannot expand that authorization. A manual can establish equipment capability, but capability does not create pesticide permission. Study and field observations remain bounded by their recorded population, protocol, context, and claim ceiling. [S08]

Commercial and manufacturer sources support only their narrow claim ceilings. They remain non-authorizing research material and cannot independently authorize publication or pesticide direction. [S06]

Field/regulatory/resistance/controversy findings

Regulatory and field records are research evidence with retrieval context and claim ceilings, not evergreen legal advice. Before publication or product advice, the exact current label, registration, jurisdiction, and applicable restrictions must be checked again. [S08]

Field observations, consumer observations, and study endpoints can identify questions or bounded results; they do not establish a universal efficacy, safety, adoption, or legal-use conclusion. [S02][S08]

Technique/IPM/equipment taxonomies

Technique, IPM, nonchemical-action, and equipment records remain distinct from pesticide authorization. A location or delivery concept is not permission, equipment capability is not label permission, and a manual rating is not a measured field calibration. [S02][S08]

The package has no equipment-calibration measurements and no measured-calibration claims. Its 449 research claims retain `authorization_effect` of `none` . [S02]

Site/import architecture and rollback

The current G019 production deployment is application SHA `1e1adc9cfce0983b29699af5f52ca67dfe1beee8` . Its receipt records a verified Advion Ant Bait Arena Label/SDS review and live hash verification; it does not convert unreviewed release evidence into public direction. [S07]

Historical G004 record: its tracked production-source code was verified locally but was not deployed at that time. Historical G005 record: its local backlog work was not pushed, deployed, or written to the production chemicals database at that time. Those historical nondeployment statements do not describe the current G019 deployment. [S07]

The import boundary is metadata-only and fail-closed: unverified documents, raw local paths, page text, rates, mixing instructions, PPE directions, and other evergreen application guidance are not imported as publishable facts. [S07][S08]

Prioritized article backlog

The editorial projection preserves all 467 candidates exactly once. It is a work queue, not a set of article approvals. The first expansion-research row is **Research article for Advion Ant Bait Arena**, with final priority **45.04**. [S03][S04]

Readiness is the minimum of applicable identity, document, citation, and independence dimensions. A row cannot become `ready_for_draft` unless it meets the threshold, has eligible professional scope and evidence, has no blocker, and has passed attribution and originality gates. [S03][S06]

All 250 packets and all 467 article theses remain nonpublic. Attribution and originality are required but not sufficient: identity, document, scope, claim, and source gates still apply. The 449 research claims remain research-only and non-authorizing. [S03][S06]

Publication state	Rows
Blocked	253
Excluded	114
Research-only	100
Ready for draft	0

Unresolved/refuted annex summary

The v1.2.1 unresolved annex contains 877 rows:

Issue type	Rows
Catalog identity unmatched	235
Identity human review required	146
Document gate under review	99
Consumer-only exclusion	71
Missing Label link	111
Identity evidence missing	40
Non-structural exclusion	35
Missing SDS link	111
Municipal/vector exclusion	8
Human review required	8
Family or generic row	6
Professional scope required	2
Reviewed override blocked	2
Fact disagreement	1
Shared article subject collision	2

These rows preserve uncertainty for audit. They do not permit filling identity, rates, registrations, PPE, restrictions, or directions by inference. [S05]

Red-team risk review

The v1.2.1 red-team sidecar has no open HIGH or CRITICAL finding. Its open MEDIUM risks remain blocked and nonpublic. [S06]

Source independence is not a blanket property. Same-publisher URLs or groups are not independent evidence, and changing text or group names within one publisher does not create independent support. [S06]

The CDC route returned HTTP 403. It remains unresolved and retry-required, not dead; a future authoritative route or successful retry is needed before relying on that material. [S06]

Commercial and manufacturer sources are limited to narrow claim ceilings. No open access or research finding overrides the public-fact gate: public facts remain fail-closed. [S06]

Methodology/reproducibility

This report distinguishes measured values from deterministic derivations, publication policy, and unresolved evidence. Measured values come from the bound v1.2.1 SQLite, manifest, CSVs, QA record, review sidecar, and G019 receipt. [S01][S02][S06][S07]

The release contract measures package version `1.2.1`, 877 unresolved rows, four accepted document reviews, 2,149 catalog products, and 34,770 document pages directly from the declared SQLite database before rendering. [S01]

The report renderer snapshots Markdown, validates HTML/PDF/DOCX artifacts in a staging directory, and records source and artifact identities in its companion manifest. [S09]

Numbered sources/data dictionary

Numbered source register

1. **[S01] v1.2.1 manifest and SQLite.** `pest-docs/chemical_knowledge/build/chemical-knowledge-v1.2.1/manifest.json` and `chemical-knowledge.sqlite`. SHA-256 values `61ba3d0857229cb117d0393937ae97b4fdfladelade0eec100d817bddcd3823c` and `91cb8b86231cec6f738d7f33dce4c1015fb7e9d344e039c3e16b0d2ee7e6da7d`.
2. **[S02] v1.2.1 QA record.** `pest-docs/chemical_knowledge/build/chemical-knowledge-v1.2.1/qa.json`. SHA-256 `90a7bd68020ca1f30304e8b3d36c34b09571300c7bcd9b017098900ae7ed0c0`.
3. **[S03] v1.2.1 editorial backlog.** `pest-docs/chemical_knowledge/build/chemical-knowledge-v1.2.1/article-backlog.csv`. SHA-256 `72031b49802e7b7e4ae2afda451490e4d58619842960d8a7f6ec20d8e1d9d84c`.
4. **[S04] v1.2.1 article universe.** `pest-docs/chemical_knowledge/build/chemical-knowledge-v1.2.1/article-universe.csv`. SHA-256 `bc4e533d10492efd6e6de558c636d9f0ffccb2b0742362fb295636e5dca0cc09`.
5. **[S05] v1.2.1 unresolved annex.** `pest-docs/chemical_knowledge/build/chemical-knowledge-v1.2.1/unresolved-annex.csv`. SHA-256 `2ba60336a004ae122429d2db0ed2c8a3f8d4a0be50cb9e1db80b2a3d3e9792d2`.
6. **[S06] G020 red-team findings.** `pest-docs/chemical_knowledge/review/red-team-findings-v1.csv`. SHA-256 `50aeb84e34dfca7bce538885209d7991cf197a0e4e73e00f5cea62e432f2d278`.

7. **[S07] G019 production receipt.** .omo/evidence/ulw/chemical-knowledge-20260806/G019-site-data-model-evidence-layer-ui-im/a1/implementation/evidence.md . SHA-256 51089f8828795eee4a23971c39b02ed8e8cb11b11ce1e9b06e79c0b4cf7ec8cc .
8. **[S08] Binding brief.** .omo/ulw-loop/chemical-knowledge-20260806/brief.md . SHA-256 fa5c7b7ce447b3c20d2ccd9260c30f71fdc3828a9bf084078410e340d8fb8767 .
9. **[S09] Report provenance.** Companion pest-docs/chemical_knowledge/report/REPORT.manifest.json , generated after source and cross-format validation.

Concise data dictionary

Data object	Meaning and publication boundary
subjects , identity_reviews , external_keys	Stable research identity, human decision, and catalog-fingerprint-qualified route key. Snapshot-local integers remain provenance.
documents , document_paths , document_bindings , document_pages	Physical SHA asset, path provenance, many-to-many product/role binding, and internal page record.
facts , fact_disagreements , unresolved_items	Page-linked candidate fact, retained disagreement, and named blocker. Regulated facts remain blocked unless their complete gate passes.
research_source_details , research_claims	Source metadata and typed claim with ceiling and non-authorizing effect.
backlog_articles , editorial_backlog , editorial_article_sources	Audited article universe, lane-specific readiness/priority projection, and source-independence metadata.

Correction/validation log

ID	Correction	Verified outcome
CV-01	Rebound the report from v1.2.0 to v1.2.1.	Frontmatter binds the v1.2.1 manifest, SQLite, red-team sidecar, and database-measured release counts.
CV-02	Replaced stale backlog, catalog, review, and page counts.	The report records 467 articles, readiness 451 at 0 and 16 at 40, catalog 2,149, four accepted reviews, 34,770 pages, and 877 unresolved rows.
CV-03	Added red-team publication constraints.	No HIGH/CRITICAL finding is open; open MEDIUM risks stay blocked and nonpublic, with source independence and CDC access described conservatively.
CV-04	Distinguished historical local nondeployment from current production.	Historical G004/G005 statements are labeled historical; current G019 deployment is identified by app SHA 1e1adc9cfce0983b29699af5f52ca67dfe1beee8 .
CV-05	Regenerated report delivery artifacts.	The companion manifest records the current Markdown and HTML/PDF/DOCX identities after renderer validation.

This correction log records evidence and publication controls. It does not turn blocked evidence into pesticide-use direction; any future publication pass must revalidate the exact current identity, label, jurisdiction, and evidence state.

Rendered from local Markdown. Source identity is recorded above for deterministic review and reproduction.