

Agri-Food Assurance Section (Alberta Agriculture & Irrigation)
Chemistry Unit – Analytical Testing Services for Apiculture

*Tests listed below are current as of March 31, 2023 and may change periodically without notice.

Test Name	Matrix (sample requirements)	Analytes
Honey Quality Package (typical package for export to Japan)	Honey (minimum 200 g)	<ul style="list-style-type: none"> • colour (Pfunds scale) • moisture • sugars (direct (natural) reducing sugar content (as invert), fructose, glucose, sucrose) • tetracycline antibiotics (chlortetracycline, oxytetracycline, tetracycline) • tylosin A + desmycosin (tylosin B)
Honey – Colour	Honey (minimum 100 g)	<ul style="list-style-type: none"> • colour (Pfunds scale)
Honey – Moisture	Honey (minimum 100 g)	<ul style="list-style-type: none"> • moisture
Honey – Sugars	Honey (minimum 100 g)	<ul style="list-style-type: none"> • sugars (direct (natural) reducing sugar content (as invert), fructose, glucose, sucrose)
Fumagillin in Honey by LC-MS/MS	Honey (minimum 50 g)	<ul style="list-style-type: none"> • fumagillin • dicyclohexylamine
Tetracycline Antibiotics in Honey by LC-MS/MS	Honey (minimum 50 g)	<ul style="list-style-type: none"> • chlortetracycline • oxytetracycline • tetracycline
Tylosin in Honey by LC-MS/MS	Honey (minimum 50 g)	<ul style="list-style-type: none"> • tylosin A • desmycosin (tylosin B)
Glyphosate in Honey by LC-MS/MS	Honey (minimum 50 g)	<ul style="list-style-type: none"> • glyphosate
Quinlorac in Honey by LC-MS/MS	Honey (minimum 50 g)	<ul style="list-style-type: none"> • quinlorac
Hydroxymethylfurfural (HMF)	Honey (minimum 50 g)	<ul style="list-style-type: none"> • hydroxymethylfurfural
Synthetic Acaricides in Honey by LC-MS/MS	Honey (minimum 50 g)	<ul style="list-style-type: none"> • amitraz degradation products (2,4-dimethylaniline; 2,4-dimethylphenylformamide; N-2,4-dimethylphenyl-N-methylformamidine) • coumaphos • flumethrin • fluvalinate