

Analysis of a dietary supplement: Turkbuilder+**Raw Data:**

Z:\Raw Data LCMS et Prep\Data-2023\LCU_23-27

Data :

Analyses\LCU_23-27

1. Objective

The objective of this study was to analyse a dietary supplement to determine its composition in ecdysteroids: Turkbuilder+, from HTLT. The supplier indicates 5% of Turkesterone and 5% of 20E (Ecdysterone).

The analyzed batch is: 2310055.

2. Analysis Conditions

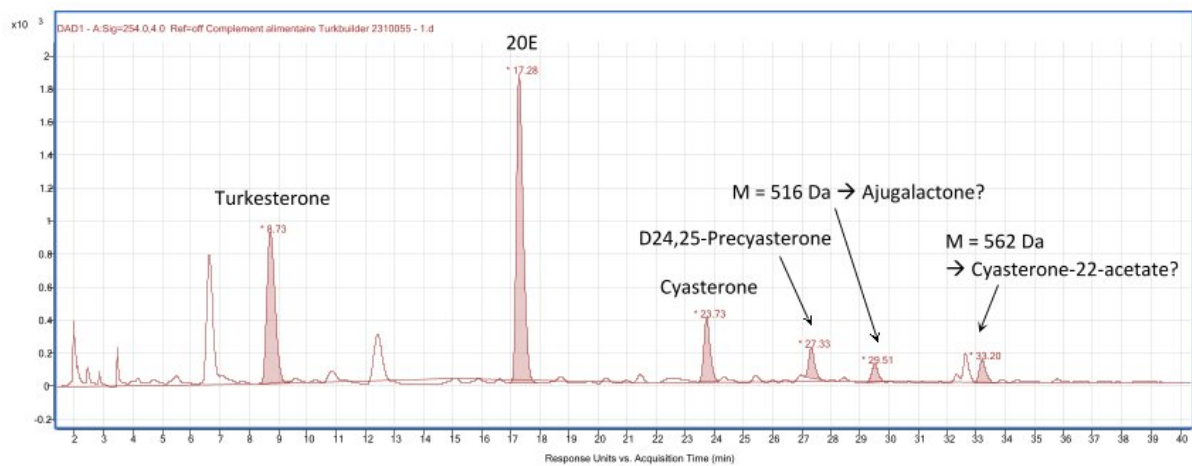
Equipment:	TQ																																
Name:	20E_Ecdy-Acquity-fluoro-phenyl_Pos-Neg_DAD																																
Column:	Acquity CSH Fluorophenyl 1.7µm 150x2.1 mm																																
Gradient:	A: Water 0.1% HCOOH B: ACN 0.1%HCOOH <table border="1" data-bbox="790 1668 1061 1982" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Time</th> <th>%A</th> <th>%B</th> </tr> </thead> <tbody> <tr> <td>0 min</td> <td>90%</td> <td>10%</td> </tr> <tr> <td>25 min</td> <td>75%</td> <td>25%</td> </tr> <tr> <td>25.5 min</td> <td>75%</td> <td>25%</td> </tr> <tr> <td>35.5 min</td> <td>55%</td> <td>45%</td> </tr> <tr> <td>36 min</td> <td>55%</td> <td>45%</td> </tr> <tr> <td>37 min</td> <td>0%</td> <td>100%</td> </tr> <tr> <td>39 min</td> <td>0%</td> <td>100%</td> </tr> <tr> <td>42 min</td> <td>90%</td> <td>10%</td> </tr> <tr> <td>55 min</td> <td>90%</td> <td>10%</td> </tr> </tbody> </table>			Time	%A	%B	0 min	90%	10%	25 min	75%	25%	25.5 min	75%	25%	35.5 min	55%	45%	36 min	55%	45%	37 min	0%	100%	39 min	0%	100%	42 min	90%	10%	55 min	90%	10%
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37 min	0%	100%																															
39 min	0%	100%																															
42 min	90%	10%																															
55 min	90%	10%																															
Flow:	0.15 mL/min																																
UV Detection:	A: 254 nm / B :298 nm / DAD : 190-400 nm																																

3. Sample preparation

- Weighing of sample in a 50mL tube, in n=3
 - o 1: 500.6 mg
 - o 2: 498.9 mg
 - o 3: 510.3 mg
- Addition of 40 mL of Water/MeOH 50/50
- Ultrasonication for 45 min
- Magnetic stirring for 1 night
- Centrifugation of an aliquot, and supernatant analysis

4. Results

The 3 replicates are identical:



UV chromatograms (254 nm) of Turkbuilder 2310055 – replicate 1

Sample	Qty of 20E*	Qty of Turkesterone*	Qty of ecdysones*
Turkbuilder 2310055 - 1	56.4 mg/g	32.6 mg/g	111.2 mg/g
Turkbuilder 2310055 - 2	56.4 mg/g	31.8 mg/g	109.5 mg/g
Turkbuilder 2310055 - 3	55.9 mg/g	33.1 mg/g	111.3 mg/g

*Quantity estimated against a reference of 20E at 25 µg/mL.