



2.14

List of analysed practices and innovations published in the Exchange platform

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Abstract	Deliverable 2.14 presents the results of the analysis of practices and innovations published in the Exchange platform that are being discussed in 2023 by B-THE NET Thematic Network. The analysis consisted in rating the practices according to: 1. Sustainability, that includes: cost-benefit, bee health, human health and environmental protection. 2. Scientific value. 3. Readiness to use. The dataset format is a list of practices with titles and rating scores elaborated at local level by the National B-THE NET centres together with the respective collaborating partner.
Keywords	Good Beekeeping Practices, Biosecurity Measures, Innovations, Exchange Platform, Rating, Evaluation, Sustainability, Cost-benefit, bee health, human health, environmental protection, scientific value and readiness-to-use, European beekeeping.



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The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf.

Table of Abbreviations and Acronyms

Abbreviation	Meaning
CP	Consortium Partners
NBC	National B-THENET Centre
TN	Thematic Network
GBP	Good Beekeeping Practices
BMB	Biosecurity Measures in Beekeeping

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6	Appendix	Errore. Il segnalibro non è definito.
7	References	Errore. Il segnalibro non è definito.

1 Executive Summary

Deliverable 2.14 presents the list of analysed practices and innovations, which are published in the Exchange platform (<https://www.bthenet.eu/platform/>) of the project B-THENET (GA n. 101059812). This document is an output of Work Package 2 – Collection and Evaluation of Practices and it is linked to Task 2.5 – Cost benefit, sustainability, scientific and readiness to practice analysis of identified practices.

The aim of this task was to evaluate the practices that are being developed by B-THENET centres in 2023, according to:

1. Sustainability, that includes: cost-benefit, bee health, human health and environmental protection.
2. Scientific value.
3. Readiness to use.

The resulting dataset is a list of practices with title and practice score (rating) elaborated at local level by the 13 National B-THENET centres participating in the project, together with their respective collaborating partners.

2 Introduction

B-THENET aims to modernise and orient towards sustainability the European Beekeeping sector by sharing the knowledge ready to be put into practice and fostering best practices exchanges. The project's ambition is to create a European network, thanks to the shapes of four Platforms: "Practices Platform", "Research & Innovation Platform", "Exchange Platform" and the "Repository platform", which engages relevant actors to collect, organise, share, disseminate, and store valuable knowledge on beekeeping practices as well as on ready-to-use research solutions at national and international level.

In particular, the project pursues the following objectives:

- Modernize the EU beekeeping sector by establishing a multi-actor network with complementary knowledge that connects: beekeepers, researchers, advisors, and the other actors in the apiculture sector
- Collect, categorize and prioritize ("Inventory") practices and new research findings ready to put into practice or not sufficiently known using a bottom-up methodology
- Create a digital knowledge platform ("Exchange") to increase the exchange of information in the EU
- Create a digital knowledge platform ("Repository") to collect, share and store knowledge on best practices, for the long term.

B-THENET strategy is based on a multi-actor approach through the participation of Partners and Collaborating Partners as well as other stakeholders of the sector (scientific, beekeepers' associations, policy-making, etc.) in the set-up of best beekeeping practices.

According to Deliverable 2.2 "Inventory of priority practices and innovations bottom-up", through the use of European Survey we could understand what practices EU beekeepers deemed as most relevant to develop within B-THENET TN activities in 2023:

- 1) Good Beekeeping Practices to "Properly place hives in the apiary" (theme "Apiary set-up and management/maintenance");
- 2) Biosecurity Measures to "Guarantee best efficacy of anti-varroa treatments" (theme "Varroosis").

The above-mentioned groups of practices have been rated according to the methodology previously developed by B-THENET partners with the aim of providing a standardised evaluation of the practices. The above-mentioned rating methodology is fully described in "D 2.22 - Methodology definition for the analysis of practices".

3 Methodology

3.1 General description

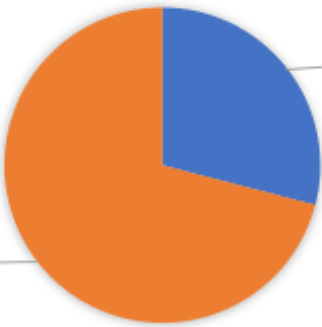
All National B-THENET Centres were provided with credentials to access the platforms (<https://www.bthenet.eu/platform/>) as “Contributors” and nine video tutorials were developed to train users on the use of the platforms:

1. Introduction - <https://youtu.be/XKtA3yTHWuo>
2. Practice template - <https://youtu.be/qkQDADVPlzw>
3. Troubleshooting - <https://youtu.be/oDkGE8AizSE>
4. Add references - <https://youtu.be/V4HF5oKFNy4>
5. Add tags - <https://youtu.be/zGGy-NJIMNk>
6. Categories and Abstract - <https://youtu.be/raKvpFNslxs>
7. Collaborative plugin - <https://youtu.be/JWsp-MJ7T3s>
8. Rating - <https://youtu.be/8N8kB5GW1Zc>
9. Preview and send - <https://youtu.be/tQDNH3PFtug>

For the successful development of the practices each NBC could create a working group of about 5 people that could be dedicated to describe about 4 practices each (dividing the total number of 22 practices).

3.2 Analysis and evaluation of the practices

Each practice should be evaluated according to “Sustainability (cost-benefit, bee health, human health, environmental protection), scientific value and readiness-to-use” analysis, presented in a previous project deliverable (D2.22 “Methodology definition for the analysis of practices”), where the methodology developed by B-THENET partners to carry out the evaluation was fully described. An Excel template was prepared to complete the mentioned analysis. The Excel file was also equipped with a macro, to automatically print a PDF showing the breakdown of the analysis. Example of the evaluation for the practice “queen caging” is presented below:

COUNTRY	Italy	
PRACTICE CATEGORY (ENGLISH)	BMB	
PRACTICE THEME (ENGLISH)	VARROOSIS	
PRACTICE CONTAINER (ENGLISH)	GUARANTEE BEST EFFICACY OF ANTI VARROA TREATMENTS, ESPECIALLY WITH ORGANIC COMPOUNDS	
PRACTICE NAME (IN LOCAL LANGUAGE)	Queen caging	
 Cost of the materials; 29% Cost of the time needed to apply the practice; 71%		
ITEM	Colony	
TOOLS AND SUPPLIES	COST OF TOOLS AND SUPPLIES	COST PER EACH ITEM for practice implementation
Queen cage	3,00 €	3,00 €
Cost of the materials		€ 3,00
COST OF THE TIME NEEDED TO APPLY THE PRACTICE		
Number of persons	1	
Time required (in minutes)	15	
Costs for one person	7,33 €	
Average hourly labor cost	29,30 €	
Cost of the time needed to apply the practice		€ 7,33
TOTAL COSTS/ITEM		€ 10,33
BENEFITS IF THE PRACTICE IS APPLIED		
Increased efficacy of organic treatment leading to improved colony health. The 50 euro corresponds to half the value of a colony	€ 50,00	
TOTAL BENEFITS/ITEM		€ 50,00
AUTOMATIC CALCULATION CONSIDERING COSTS AND BENEFITS		
RATING FOR BEE HEALTH	3	
RATING FOR HUMAN HEALTH	0	
RATING FOR ENVIRONMENTAL IMPACT	3	
RATING FOR SCIENTIFIC VALUE	3	
RATING FOR READINESS TO USE - BEEKEEPERS KNOWLEDGE	1	
RATING FOR READINESS TO USE - TOOLS	3	
TOTAL VALUE		15

4 Results - List of practices published in the Exchange platform

The tables below summarise the list of developed practices published on the 31st of May 2023 in the project Exchange platform and the respective ratings resulting from the evaluation. Practices are presented by each Partner's country (in alphabetical order) and sorted by score (from highest to lowest). Practices are published and evaluated in the Exchange Platform in local language, to facilitate discussion among partner countries.

Austria

Nr.	Title of the practice	Score
1	Vermeidung von Bereichen mit hoher Schadstoffexposition	19
2	Richtige Ausrichtung des Bienenstocks	19
3	Identifizierung des besten Zeitpunktes für Varroa-Behandlungen in Abhängigkeit der nationalen Klimazone	17
4	Verwendung von Oxalsäure zur Varroabekämpfung	17
5	Königin käfigen - Bannwaben	17
6	Einhalten eines angemessenen Abstandes zu anderen Bienenständen	17
7	Verwendung von Ameisensäure zur Varroabekämpfung	16
8	Verwendung von Thymol zur Varroabekämpfung	16
9	Brutentnahme	16
10	Verwendung von anderen umweltverträglichen Stoffen zur Varroabekämpfung	16
11	Sicherstellung des Vorhandenseins von Bäumen (oder anderen Barrieren), um Schutz vor Wetterstressoren (z. B. Hitze, Wind usw.) zu schaffen	16
12	Feststellung des Varroabefalls während der Imkereisaison	15
13	Einhaltung eines Sicherheitsabstandes zu Häusern/Dörfern	15
14	Vermeidung von übermäßig feuchten, oder windigen Bereichen	15
15	Haltung einer angemessenen Anzahl von Bienenstöcken	14
16	Vermeiden von Hindernissen für die Bienen (z. B. hohes Gras/Schnee vor dem Eingang des Bienenstocks)	14
17	Wärmebehandlungen	13
18	Vermeidung von Bereichen mit allergenen oder toxischen Pflanzen	13
19	Saisonale Verlegung des Bienenstandes	12
20	Verhinderung des Diebstahls von Bienenstöcken	11
21	Die Errichtung von Bienenständen in einem für Fahrzeuge zugänglichen Bereich	10
22	Vorhandensein ausreichender Lagerkapazitäten für Equipment und Bienenprodukte	10

Belgium

Nr.	Title of the practice	Score
1	Opsluiten van de koningin	15

2	Verwijderen van broed	14
3	Varroabesmetting inschatten tijdens het bijenteeltseizoen	13
4	Blootstelling aan vervuiling voorkomen	12
5	Correct plaatsen van bijenvolken	12
6	Obstakels voor de bijen vermijden	12
7	Varroabehandeling afstemmen op de nationale klimaatzone	12
8	Gebruik van oxaalzuur	12
9	Een gepast aantal bijenvolken houden	11
10	Veilige afstand bewaren van huizen en dorpen	10
11	Hitte behandeling	10
12	Toegankelijkheid van bijenhal voor auto's	9
13	Gunstige afstand bewaren van andere bijenstanden	9
14	Aanwezigheid van bomen (of andere barrières) tegen weer stressoren	8
15	Diefstal en vandalisme van bijenvolken voorkomen	8
16	Gebieden mijden waar allergene of toxische planten voorkomen	7
17	Blootstelling aan extreme vochtigheid en wind mijden	7
18	Voorziening van opbergruimte op de bijenstand	7
19	Gebruik van thymol	7
20	Gebruik van mierenzuur	6
21	Seizoensgebonden verplaatsen van bijenvolken	4
22	Gebruik van andere producten met lage impact op het milieu	N/A

Croatia

Nr.	Title of the practice	Score
1	Utvrđivanje pravodobnosti tretiranja protiv varooze prema nacionalnim klimatskim područjima	19
2	Izbjegavanje izloženosti onečišćivačima	18
3	Procjena stupnja invadiranosti grinjom Varroa destructor tijekom pčelarske sezone	16
4	Uporaba oksalne kiseline – oksalna kiselina i glicerol na biorazgradivim krpama	16
5	Uporaba mravlje kiseline - dugotrajni tretman primjenom razrijeđene kiseline u koncentraciji 15%	16
6	Uporaba timola - Thymovar	16
7	Zatvaranje matice u izolacijski kavezić	16
8	Pravilno postavljanje košnice - pregled pčelinje zajednice	15
9	Osigurati dovoljan razmak pčelinjaka od naseljenog mjesta	14
10	Postavljanje pčelinjaka na području dostupnom vozilima (čvrsto / suho tlo)	13
11	Osiguravanje prisustva drveća (drugih zaklona) za zaštitu od vremenskih nepogoda	13
12	Držanje prikladnog broja pčelinjih zajednica	13
13	Uklanjanje trutovskog legla	13
14	Izbjegavanje područja na kojem u značajnijoj količini ima alergeni ili otrovnih biljka	12
15	Sezonsko seljenje pčelinjaka	12

16	Izbjegavanje prepreka za pčele (ispred košnice)	11
17	Uporaba drugih varoocidnim tvari s niskim učinkom na okoliš	11
18	Izbjegavanje izrazito vlažnih i vjetrovitih područja	10
19	Osigurati dovoljno mjesta za skladištenje / pčelarske alate	10
20	Sprečavanje krađe košnica	10
21	Tretmani zagrijavanjem - inovativna primjena toplinske komore	8
22	Zadržavanje odgovarajućeg razmaka između pčelinjaka	N/A

Denmark

Nr.	Title of the practice	Score
1	Brug af oxalsyre	15
2	Brug af myresyre	14
3	Brug af thymol	14
4	Varroamonitering	11
5	Yngel fratagning	11
6	Dronninge indespærring	11
7	Varmebehandling	10
8	Undgå forurenede områder	N/A
9	Vælg en bigårdsplacering med let adgang for køretøjer	N/A
10	Undgå områder med udbredte giftige planter (engbrandbæger m.m.)	N/A
11	Undgå meget fugtige eller forblæste bigårde	N/A
12	Sikre passende afstand til andre bigårde	N/A
13	Gode opbevaringsfaciliteter	N/A
14	Forbyggelse af tyveri	N/A
15	Sikre passende antal bifamilier	N/A
16	Flytning af bigårde	N/A
17	God bistadeopstilling	N/A
18	Undgå fysiske forhindringer for bierne	N/A

Germany

Nr.	Title of the practice	Score
1	Die Errichtung von Bienenständen in einem für Fahrzeuge zugänglichen Bereich	5
2	Feststellung des Varroabefalls während der Imkereisaison	5
3	Verwendung von Oxalsäure zur Varroabekämpfung	5
4	Verwendung von Ameisensäure zur Varroabekämpfung	5
5	Königin käfigen – Bannwaben	5
6	Bereiche, die übermäßiger Feuchtigkeit und Wind ausgesetzt sind	4
7	Sicherstellung des Vorhandenseins von Bäumen (oder anderen Barrieren), um Schutz vor Wetterstressoren (z. B. Hitze, Wind usw.) zu schaffen	4
8	Vorhandensein ausreichender Lagerkapazitäten für Equipment und Bienenprodukte	4

9	Vermeiden von Hindernissen für die Bienen (z. B. hohes Gras/Schnee vor dem Eingang des Bienenstocks)	4
10	Brutentfernung zur Varroabekämpfung	4
11	Angemessenen Abstand zu anderen Bienenstöcken einhalten	3
12	Verhinderung des Diebstahls von Bienenstöcken	3
13	Eine angemessene Anzahl von Bienenstöcken	3
14	Saisonale Verlegung des Bienenstandes	3
15	Sicherheitsabstand zu Häusern/Dörfern	2
16	Verwendung von Thymol zur Varroabekämpfung	2
17	Andere Verbindungen mit geringer Umweltbelastung	2
18	Vermeidung von Bereichen mit allergenen oder toxischen Pflanzen	1
19	Wärmebehandlungen zur Varroabekämpfung	1
20	Richtige Ausrichtung des Bienenstocks	N/A
21	Identifizierung des besten Zeitpunkts für Varroa-Behandlungen in Abhängigkeit von den nationalen Klimazonen	N/A

Greece

Nr.	Title of the practice	Score
1	Προσδιορισμός της προσβολής από βαρρόα κατά τη διάρκεια της μελισσοκομικής περιόδου	15
2	Προσδιορισμός της καλύτερης εποχής για την αντιμετώπιση του βαρρόα ανάλογα με τις εθνικές κλιματικές ζώνες	15
3	Χρήση οξαλικού οξέος	15
4	Χρήση μυρμηκικού οξέος	15
5	Χρήση άλλων ακαρεοκτόνων φιλικών προς τη μέλισσα και το περιβάλλον/ προϊόντα	15
6	Εγκλωβισμός της βασίλισσας σε κλουβί	15
7	Θερμικές επεξεργασίες	15
8	Αφαίρεση γόνου	14
9	Επαρκής αριθμός κυψελών	13
10	Χρήση θυμόλης	12
11	Διατήρηση ασφαλούς απόστασης από άλλες κυψέλες	12
12	Εξασφάλιση της παρουσίας δέντρων (ή άλλων εμποδίων) για την παροχή προστασίας από καιρικές συνθήκες (π.χ. ζέστη, άνεμος κ.λπ.)	12
13	Αποφυγή περιοχών όπου θα μπορούσαν να βρεθούν αλλεργιογόνα ή τοξικά φυτά σε σημαντική ποσότητα	12
14	Σωστός προσανατολισμός της κυψέλης	12
15	Επιλογή περιοχών που δεν εκτίθενται σε υπερβολική υγρασία και άνεμο	11
16	Πρόληψη της κλοπής κυψελών	10
17	Ασφαλής και επαρκής χώρος για αποθήκευση εργαλείων εργασίας και προϊόντων	9
18	Αποφυγή εμποδίων για τις μέλισσες μπροστά στις κυψέλες	8
19	Τοποθέτηση μελισσοκομείων σε περιοχή προσβάσιμη από οχήματα	7
20	Εποχιακή μετεγκατάσταση του μελισσοκομείου	7
21	Ασφαλής απόσταση από σπίτια/χωριά	N/A

Hungary

Nr.	Title of the practice	Score
1	A szennyező anyagoknak való kitettség elkerülése	15
2	Megfelelő távolság tartása a többi méhészettől	15
3	A varroa kezelések legmegfelelőbb időpontjának meghatározása az országos éghajlati területek szerint	13
4	Fák (vagy más akadályok) jelenlétének biztosítása az időjárási viszonyosságokkal szembeni védelem megteremtése érdekében	12
5	Megfelelő számú méhkaptár fenntartása a vízforrás és mézelő növények hozzáférhetőségéhez viszonyítottan	12
6	A méhek akadályozottságának elkerülése	12
7	A varroa-fertőzöttség felmérése a méhészeti szezonban	12
8	A hangyasav használata	12
9	A timol használata	12
10	Egyéb alacsony környezeti hatású vegyületek használata	12
11	Elegendő hely a tároló helyiségek/munkaszerszámok számára	11
12	A méhészet szezonális áthelyezése	11
13	Az oxálsav használata	11
14	Túlzott nedvességnek és szélnek kitett területek kerülése	10
15	Fiasítás eltávolítás	10
16	Anyá zárkázása	10
17	Hőkezelések	10
18	Területek elkerülése ahol szignifikánsan nagy mennyiségű allergén vagy mérgező növény található	9
19	Biztonságos távolság tartása házaktól/falvaktól	9
20	Méhkaptárak lopásának megelőzése	9
21	Méhészet létesítése járművek által megközelíthető területen	7
22	A kaptár megfelelő elhelyezése	7

Italy

Nr.	Title of the practice	Score
1	Evitare l'esposizione a sostanze inquinanti	19
2	Posizionamento corretto dell'arnia	19
3	Evitare le aree esposte a umidità e vento eccessivi	17
4	Garantire la presenza di alberi (o altre barriere) per creare una protezione contro i fattori di stress atmosferici	17
5	Mantenere una distanza adeguata dagli altri apiari	17
6	Identificare il momento migliore per i trattamenti contro la varroa in base alle aree climatiche nazionali	17
7	Ingabbiamento della regina	17
8	Mantenere una distanza di sicurezza dalle case/dai villaggi	16
9	Uso di acido ossalico	16

10	Uso di acido formico	16
11	Uso di timolo	16
12	Uso di altri composti a basso impatto ambientale	16
13	Rimozione della covata	16
14	Valutare il livello di infestazione da varroa durante la stagione apistica	15
15	Mantenere un numero adeguato di arnie	14
16	Evitare ostacoli per le api	14
17	Evitare le aree in cui potrebbero trovarsi in quantità significative piante allergeniche o tossiche	13
18	Trattamenti termici	13
19	Trasferire stagionalmente l'apiario	12
20	Installare gli apiari in un'area accessibile ai veicoli	11
21	Prevenire i furti di arnie	11
22	Disporre di spazio sufficiente per i magazzini/gli strumenti di lavoro	10

Poland

Nr.	Title of the practice	Score
1	Określenie najlepszego momentu na przeprowadzenie zabiegów warzobóczych w odniesieniu do lokalnych warunków klimatycznych	21
2	Ograniczanie czerwienia matek pszczelich	21
3	Stosowanie kwasu szczawiowego	20
4	Stosowanie kwasu mrówkowego	20
5	Ocena stopnia porażenia rodzin pszczelich przez pasożyta Varroa w sezonie pszczelarskim	19
6	Stosowanie tymolu	19
7	Usuwanie czerwii	18
8	Unikanie ekspozycji na zanieczyszczenia	16
9	Utrzymywanie odpowiedniej liczby rodzin pszczelich	16
10	Unikanie obszarów ze znaczną ilością roślin alergizujących lub toksycznych	15
11	Zachowanie odpowiedniej odległości od innych pasiek	15
12	Prawidłowe ustawienie uli	15
13	Zachowanie bezpiecznej odległości od zabudowań mieszkalnych	14
14	Pielęgnacja pasieczyska	14
15	Zakładanie pasieki na obszarze dostępnym dla pojazdów	13
16	Posiadanie wystarczającej ilości miejsca do magazynowania sprzętu i narzędzi pracy	13
17	Zapobieganie kradzieżom rodzin pszczelich	13
18	Sezonowe przemieszczanie pasieki / Pasieki wędrowne	13
19	Unikanie terenów narażonych na wysoką wilgotność i wiatr	11
20	Zapewnienie obecności drzew (lub innych barier) w celu stworzenia ochrony przed niekorzystnymi warunkami pogodowymi	11
21	Stosowanie innych związków	N/A

Slovakia

Nr.	Title of the practice	Score
1	Bedste tidspunkt for varroa bekæmpelse	15
2	Vyhýbanie sa oblastiam, kde sa vo významnom množstve vyskytujú alergénne alebo toxické rastliny	12
3	Použitie kyseliny mravčej	12
4	Vyhýbanie sa vystaveniu znečisťujúcim látkam	11
5	Udržiavanie primeranej vzdialenosti od ostatných včelínov	11
6	Zabezpečenie prítomnosti stromov (alebo iných bariér) na vytvorenie ochrany pred poveternostnými stresormi	9
7	Zabránenie proti krádeži úľov	9
8	Vyhýbanie sa oblastiam vystaveným nadmernej vlhkosti a vetru	8
9	Dostatok priestoru pre skladovacie priestory/pracovné nástroje	8
10	Dodržiavanie bezpečnej vzdialenosti od domov/dedín	7
11	Zriaďovanie včelínov v oblasti prístupnej vozidlám	3
12	Použitie kyseliny šťaveľovej	N/A
13	Odstránenie plodu	N/A
14	Umiestnenie kráľovien do klieťok	N/A
15	Udržiavanie primeraného počtu úľov	N/A
16	Sezónne premiestnenie včelína	N/A
17	Správne umiestnenie úľa	N/A
18	Vyhýbanie sa prekážkam pre včely	N/A
19	Hodnotenie stupňa zamorenia varroa počas včelárskej sezóny	N/A
20	Identifikácia najvhodnejšieho momentu pre liečbu varroa podľa národných klimatických oblastí	N/A
21	Použitie tymolu	N/A
22	Používajte iné zlúčeniny s nízkym dopadom na životné prostredie	N/A

Slovenia

Nr.	Title of the practice	Score
1	Izogibanje izpostavljenosti onesnaževalcem	19
2	Identifikacija najboljšega časa za zatiranje varoj, glede na nacionalno podnebno območje	18
3	Uporaba mravljične kisline - kratkotrajno izhlapevanje oz. šok metoda z uporabo 85 % mravljične kisline	17
4	Ohranjanje zadostne oddaljenosti od drugih čebelnjakov/stojišč	15
5	Ocena napadenosti čebel z varojami (Varroa destructor) med čebelarsko sezono	15
6	Uporaba oksalne kisline - API-Bioxal za zimsko tretiranje (kapanje)	15
7	Uporaba timola -Thymovar	15
8	Pripiranje matice	15
9	Izrezovanje trotovske zalege	13

10	Izogibanje območjem, kjer bi lahko bile prisotne alergene rastline v večjih količinah	12
11	Zagotavljanje prisotnosti dreves (ali drugih varoval) za zaščito stojišča pred vremenskimi nepravilnostmi	12
12	Selitev čebeljih družin na pašo	12
13	Postavitev čebelnjaka na območju dostopnem za vozila	11
14	Zaščita stojišča pred medvedi	11
15	Izogibanje lokacij, ki so izpostavljene prekomerni vlagi in vetru	10
16	Zagotovitev primerne prostora za skladiščenje in delo	10
17	Pravilna namestitev čebeljih družin (razdalja med panji, orientacija...)	10
18	Uporaba drugih varoacidnih pripravkov z nižjim vplivom na okolje	10
19	Toplotno zatiranje varoj	10
20	Zagotavljanje zadostne razdalje od čebelnjaka/stojišča do naselji/javnih mest	N/A
21	Ohranjanje ustreznega števila čebeljih družin	N/A
22	Odstranjevanj ovir pred stojiščem čebeljih družin za lažje izletavanje čebel (visoka trava pred panji, ...)	N/A

Spain

Nr.	Title of the practice	Score
1	Evitar la exposición a los contaminantes	20
2	Evitar áreas con plantas alergénicas o tóxicas presentes en cantidades significativas	19
3	Evitar áreas con demasiado viento o humedad	18
4	Mantener una distancia adecuada con otros colmenares	18
5	Recolocación del colmenar en función de la estación del año	17
6	Evitar robos de las colmenas	16
7	Identificación del mejor momento para realizar los tratamientos en función del área climática nacional	16
8	Emplear correctamente el ácido oxálico	16
9	Emplear correctamente otros compuestos de bajo impacto ambiental	16
10	Colocar el colmenar en un lugar accesible con vehículos	15
11	Asegurar la presencia de árboles (u otras barreras) que aseguren una barrera de protección	15
12	Monitorizar y mantener el número de ácaros de varroa por debajo del umbral nocivo	15
13	Emplear correctamente el timol	15
14	Correcta colocación de la colmena	14
15	Emplear correctamente el ácido fórmico	14
16	Eliminación de la cría	14
17	Mantener un ratio equilibrado de número de colmenas instaladas y la cantidad de plantas/recursos hídricos y melíferos en el área en el que el colmenar es instalado	13
18	Evitar obstáculos cerca de la piquera	13
19	Interrupción de la cría mediante la separación de las reinas	12
20	Contar con suficiente espacio para almacenar materiales y herramientas	11

21	Tratamientos térmicos	11
22	Mantener una distancia adecuada con respecto a viviendas habitables o aldeas	N/A

Sweden

Nr.	Title of the practice	Score
1	Undvik placering där det finns risk för förorening	N/A
2	Placera bigårdar i ett område som är tillgängligt för fordon	N/A
3	Undvik områden där allergiframkallande eller giftiga växter kan finnas i stora mängder.	N/A
4	Undvik områden där det är fuktigt och blåsig	N/A
5	Försäkra att det finns träd (eller andra barriärer) som skyddar mot väderstress (t.ex. värme, vind osv.).	N/A
6	Håll tillräckligt avstånd till andra bigårdar	N/A
7	Ha tillräckligt utrymme för förvaring/arbetsredskap	N/A
8	Håll säkert avstånd till bebyggelse	N/A
9	Förebygg stöld av bikupor	N/A
10	Håll ett, för området, lämpligt antal bisamhällen i bigården	N/A
11	Säsongsmässig flytt av bigården	N/A
12	Lämplig placering av bikupan i bigården	N/A
13	Undvik hinder för bina	N/A
14	Bedömning av varroaangreppsgraden under biodlingssäsongen	N/A
15	Fastställande av bästa tidpunkten för varroabehandlingar, anpassat efter rådande klimatförhållanden	N/A
16	Användning av oxalsyra	15
17	Användning av myrsyra	14
18	Användning av tymol	14
19	Användning av andra ämnen med låg miljöpåverkan	11
20	Borttagning av drönaryngel	11
21	Inspärning av drottning	11
22	Värmebehandlingar	10

Innovations

One country of the consortium (Croatia) was able to identify innovations connected to the practices developed in 2023. Innovations highlighted are summaries in the table below. It should be noted that in the following months innovations will be further investigated in the TN even with the support of on-line external to the partnership users.

Practice	Innovation
Izbjegavanje izloženosti onečišćivačima	https://doi.org/10.1007/s00128-019-02713-y
Procjena stupnja invadiranosti grinjom Varroa destructor tijekom pčelarske sezone	https://www.mdpi.com/1108678

Uporaba oksalne kiseline – oksalna kiselina i glicerol na biorazgradivim krpama	Oliver, R. Extended-Release Oxalic Acid For Varroa Management. Instructions for extended-release oxalic acid - Scientific Beekeeping. Pristupljeno 17. svibnja 2023.
Zatvaranje matice u izolacijski kavezić	DOI: 10.1080/00218839.2020.1793278
Tretmani zagrijavanjem - inovativna primjena toplinske komore	https://link.springer.com/article/10.1007/s13592-019-00715-7

5 Conclusions

This deliverable provides the dataset related to the rating of practices in the “Exchange platform”. Practices are scored based on the methodology developed by B-THENET partners, described in D2.22. From June to August 2023, the drafted practices published and rated in the Exchange Platform will be further developed with a bottom-up approach, to best reflect their national realities. Practice refinement, will be carried out considering the feedback coming from the platform users (beekeepers, advisors and other stakeholders), that can “add tips”, “make a comment” and “ask a question”, to improve the draft version of practices. As a result of the foreseen phase of refinement, scores provided by B-THENET partners may vary, based on the positive or negative feedbacks provided by beekeepers.

B THE NET



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