

How to reduce the environmental footprint of consumer goods: LCA studies on fruit and vegetables production

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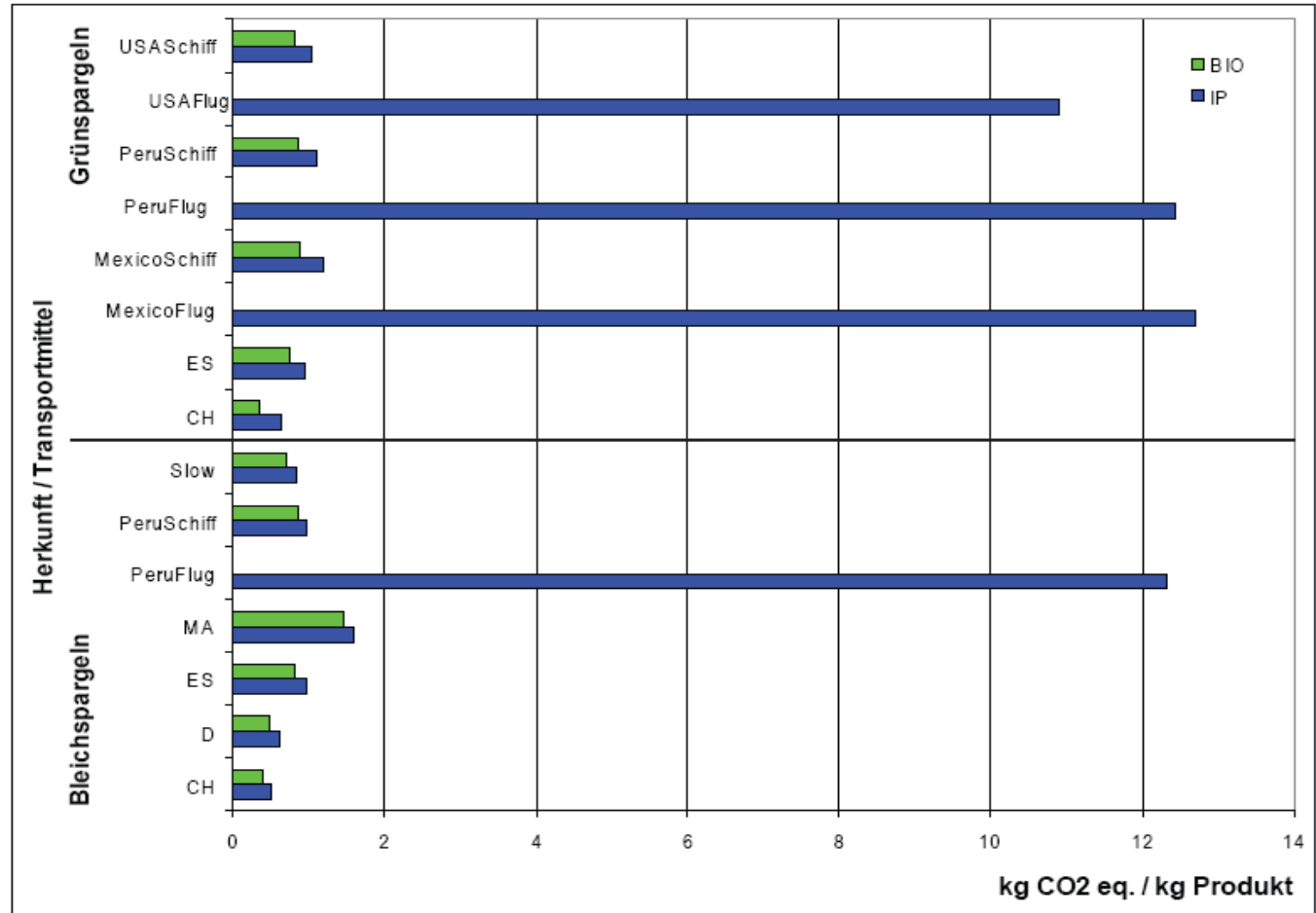
How to reduce the environmental Footprint of Consumer Goods

- **Aim: Ecological improvement of food consumption**
 - Product range selection
 - Buying behavior of end-users
- **Basis: Life cycle assessment**
- **Emergence of sensitive parameters regarding:**
 1. Carbon footprint
 2. Land use / biodiversity
 3. Water use

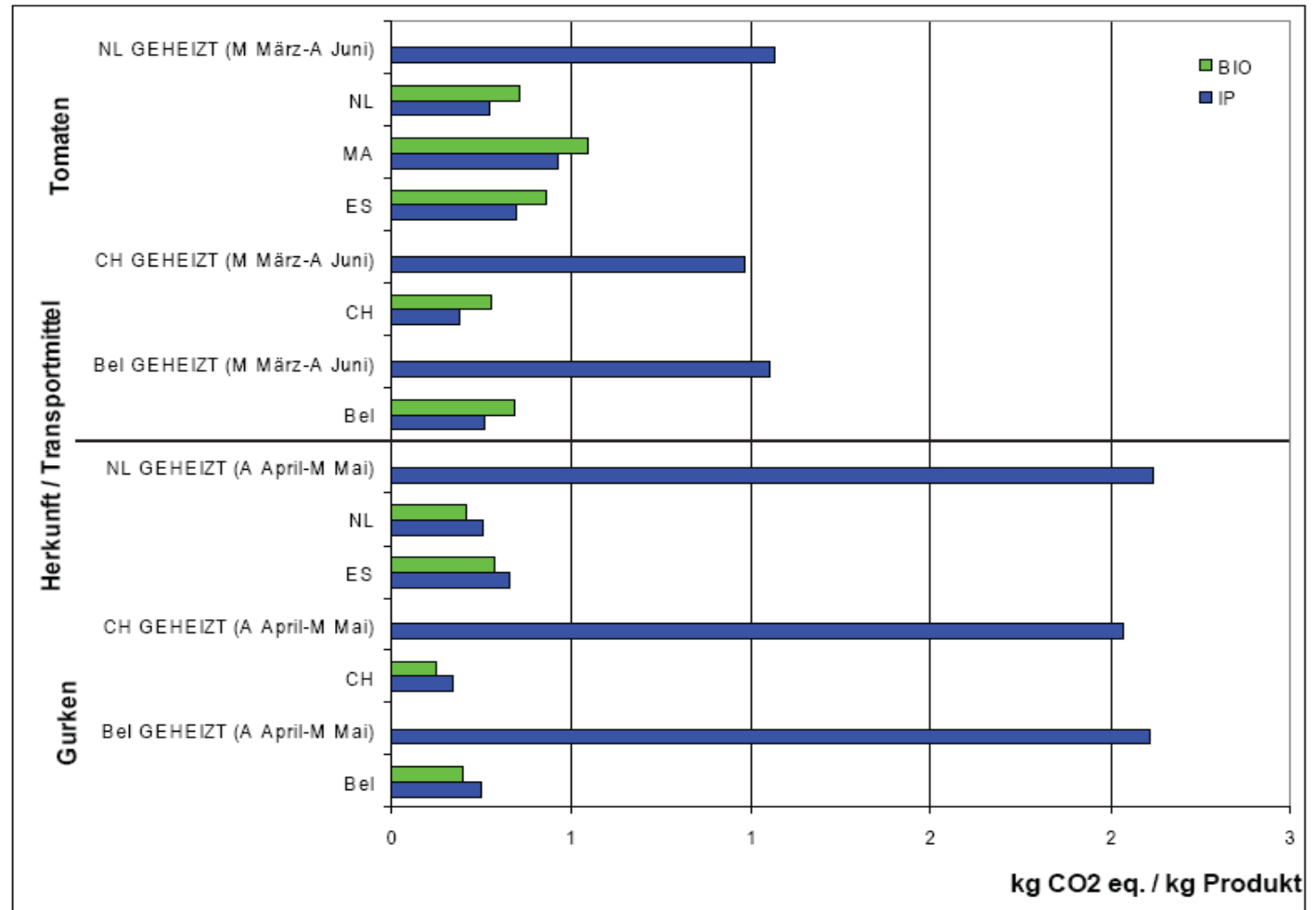
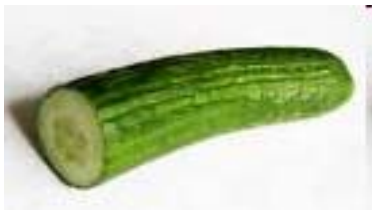
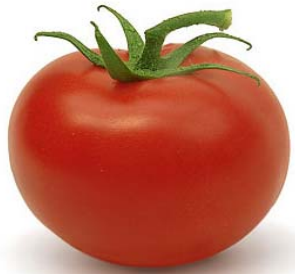
General conditions

- 28 vegetables & fruits
- 29 countries of origin
- Integrated and organic production
- Field-grown and greenhouse production
- Background data for transport, energy, fertilizer, pesticides etc. are based on ecoinvent v2.01 / SimaPro 7
- Functional unit: 1 kg vegetables or fruits at POS (original substance)

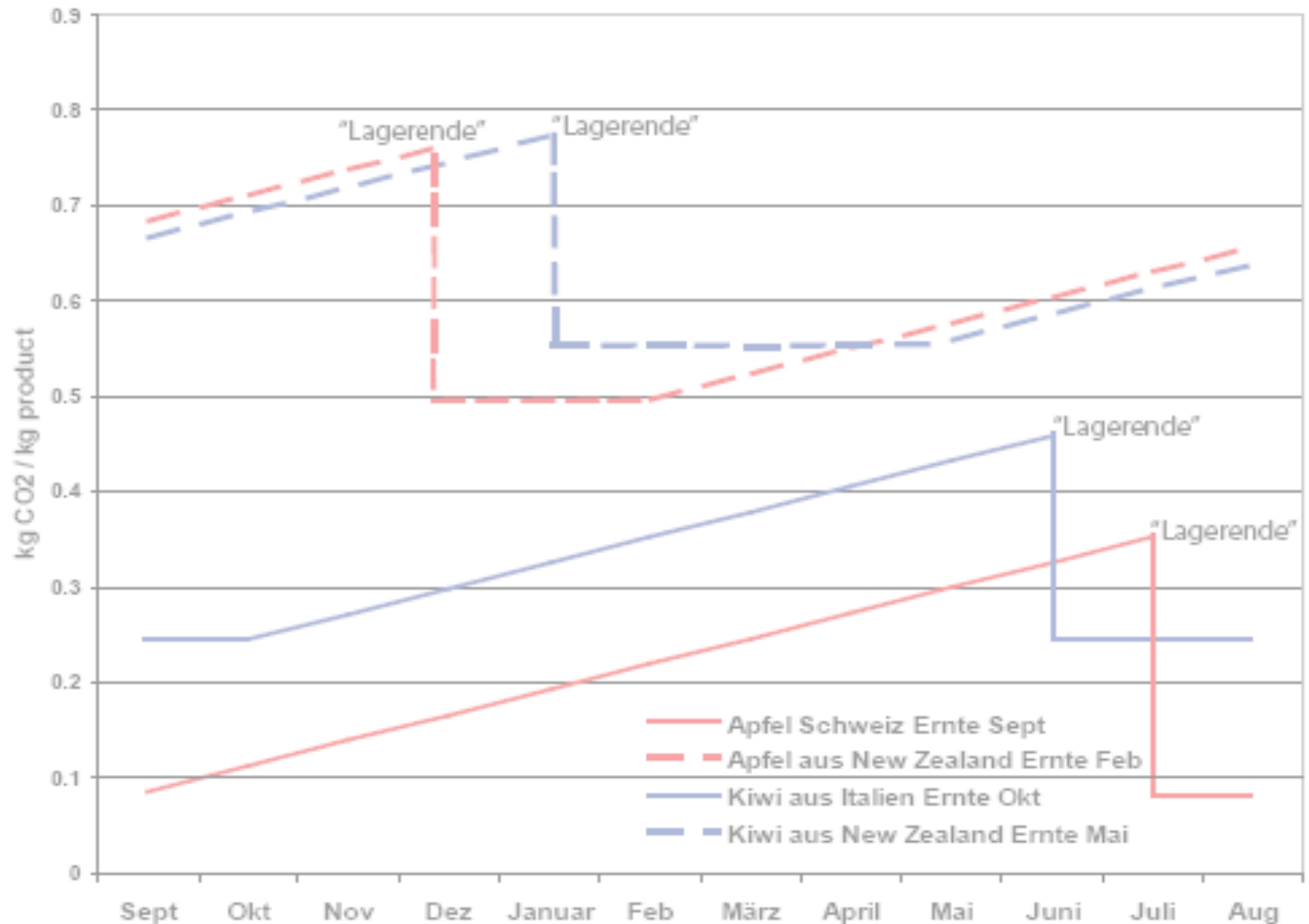
Green or white Asparagus: Transport is one of the key elements



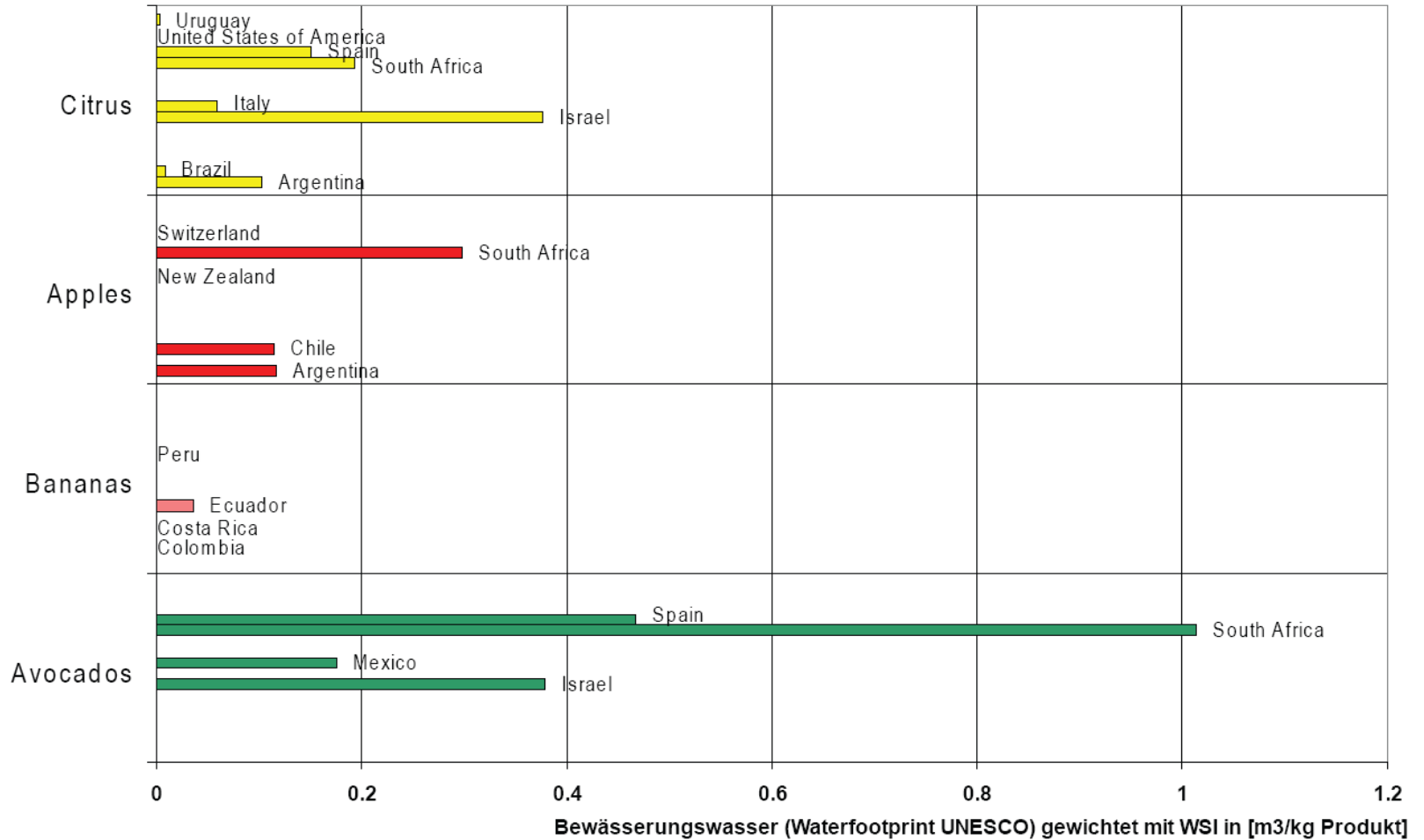
Greenhouse Production: Heated or non heated makes the difference



Greenhouse gases: Seasonal aspects must be considered



Water Footprint: Big regional differences



Communicating with consumers: Which messages can be given?

Climatop



TESCO

60W Pearl Lightbulb
 Production 1%
 Distribution 0%
 Store 0%
 Use 99%
 Waste management 0%

Total unit footprint per 1,000 hours use: **34kg**

100W Pearl Lightbulb
11W CFL (low energy)
20W CFL (low energy)
60W Spotlight

working with the Carbon Trust

34kg CO2
 Compared to 11W low energy **6.5kg**

per 1000 hrs of use

The carbon footprint of this lightbulb is **34kg** per 1000 hours of use and we have committed to reduce it

By comparison the footprint for the equivalent energy saving lightbulb (11w) is **6.5kg** per 1000 hours of use

" Casino s'engage pour l'environnement en collaboration avec ses fournisseurs pour réduire ses émissions de gaz à effet de serre "

L'INDICE CARBONE*

est une estimation de la quantité de gaz à effet de serre (CO₂...) émise lors des principales étapes du cycle de vie du produit (production + transformation + emballage + transport + distribution).

Cette méthode d'évaluation est issue d'une collaboration avec un organisme indépendant. La mesure est exprimée en g équivalent CO₂ pour 100 g de produit.

* Valable en France Métropolitaine

L'INDICE CARBONE de ce produit

450g de CO₂

Faible impact environnemental Fort impact environnemental

Plus d'informations : www.produits-casino.fr ou SERVICE CONSOMMATEURS

RECYCLAGE*

Vous aussi vous pouvez agir !

37% de l'emballage sera recyclé compte tenu du tri actuel des ménages

89% de l'emballage pourra être recyclé si on trie tous !

INDICE CARBONE

450g de CO₂

voir au dos

Declaring and offsetting goods transported by air

- By air transports create the **biggest impact** of greenhouse gases
- Declaration of air-freighted goods is **easy to understand** for consumers, but has it changed their purchasing habits?
- Target: **Cut down on air freight** - in 2009 no more promotions with air freight fruits and vegetables
- **CO₂ offsets** financed by the Coop Sustainability Fund
- But: A study shows that roses imported by air from Kenya produce less CO₂ throughout the entire lifecycle than roses from heated greenhouses imported by truck from the Netherlands.



A possible way of labeling LCA results in the future?

provisional



Additional information on pack – who will read it?

INFO

volmet-Halbhartkäse, aus Rohmilch
Fromage gras à pâte mi-dure, au lait cru
Formaggio grasso a pasta semidura, di latte crudo

Zutaten: Milch (Schweiz), Kochsalz (odiert)
Ingrédients: lait (Suisse), sel de cuisine iodé.
Wargestellt in der Schweiz/Fabriquè en Suisse
Unter Schutzatmosphäre abgepackt.
Conditionné sous atmosphère protectrice.

Nach dem Kauf bei höchster
temperatur 5°C aufbewahren.
Conserver à 5°C au
maximum après l'achat.

Lizenznehmer:
Emmi, 6002 Luzern
Bio-Zertifizierung:
BioInspecta AG, 5070 Frick

CH 2038

15 x 9 mm 20 x 9 mm 15 x 9 mm

DAY

Coop Info Service
8002 Basel
Info-Tel 0843 888 444
www.coop.ch

Eindruckfläche
für EAN-Code
35 x 12 mm

coop naturaplan

bio **Appenzeller** **SWITZERLAND**

classic - mittelreif - mi-salé - semi-piccante

1 Portion (10g)

Energie/kcal: **115 6%**

Zucker/Sucrose: **0g 0%**

Fett/Lipides: **0,6g 14%**

proteins/protéines: **5,7g 29%**

minerals/minéraux: **0,6g 10%**

INFO

coop naturaplan

bio **Schweizer Rapsöl** **Huile de colza suisse** **Olio di colza svizzero**

5 dl

kaltgepresst
 pressée à froid
 spremuto a freddo

2 kcal/10ml/100 (10 ml)
Energie/kcal: 81

Info: In 100 ml Rapsöl sind 8g Alpha-Linolensäure enthalten. Diese Omega-3-Fettsäure leistet im Rahmen einer ausgewogenen Ernährung einen Beitrag für die Gesundheit.
100 ml d'huile de colza contiennent 8g d'acide alpha-linolénique. Ce composé contribue dans le cadre d'une alimentation équilibrée, aux effets bénéfiques sur la santé.

INFO

Zutaten: Rapsöl (Schweiz).
Ingrédients: huile de colza (Suisse).

Ingrédients: olio di colza (Svizzera).

100 ml enthalten ca./cont. env.:
Energie/énergie: 3400 kJ (813 kcal)

Energie/proteines: 0g
Kohlenhydrate/glycides: 0g
- davon Zucker/dont sucrose: 0g
Fett/lipides: 92g
davon/dont:
- gesättigte Fettsäuren/ acides gras saturés: 6g
- einfach ungesättigte Fettsäuren/ acides gras monoinsaturés: 54g
- mehrfach ungesättigte Fettsäuren/ acides gras polyinsaturés: 27g
davon/dont:
- Omega-3 Fettsäuren (Alpha-Linolensäure)/acides gras oméga-3 (acide alpha-linolénique): 6g
- Omega-6 Fettsäuren (Linolensäure)/acides gras oméga-6 (acide linoléique): 21g
- Cholesterin/cholestérol: 0mg

Nährungsfasern/fibres alimentaires: 0g
Natrium/sodium: 0g
Vitamin E/vitamine E: *20mg

*10 ml decken 20% der empfohlenen Tagesdosis für Erwachsene
*10 ml couvrent 20% de l'apport journalier recommandé pour un adulte

Platzhalter für
EAN-Code 13stellig
02 %
SC-Norm 0
7 610818 923006

naturaplan
Naturaplan mit Kresse –
Bio olive Kompressen
Label Naturaplan avec laurier –
Le bio sans compromis
Naturaplan est gamma Bio –
Bio senza compromessi
www.coop.ch/naturaplan

INFO

Sowohl für die kalte als auch
warme Küche geeignet.
S'utilise à froid ou chaude.
Indicato sia per piatti freddi
che caldi.

Kühl und dunkel aufbewahren.
Conserver au frais et à l'abri
de la lumière.
Conservare in luogo fresco
e al riparo dalla luce.

Lizenznehmer/Hersteller:
Olaric SA, SABO,
6928 Marno
Bio-Zertifizierung:
BioInspecta AG,
5070 Frick

coop
Info Service
Postfach 2550, 4002 Basel
Info-Tel 0843 888 444
www.coop.ch
*Nationaler Tarif/ Tariff nazionale/
Tariffa nazionale

DAY
maximaler bio:
maximale protéines:
mindestens kalter bio:
conserver part. au:
conserver part. entro:

A
B

Platz für Eindruck:
33 x 25 mm

What about existing standards for sustainable production?



GLOBALG.A.P.
The Global Partnership for Good Agricultural Practice

RSPO
Roundtable on Sustainable Palm Oil



**Common Code for the
Coffee Community Association (4C)**



Conclusions regarding CO₂ Labeling

- **Focus on reduction of impact and improving of processes:**
 - The aim is to achieve a long-term reduction in CO₂ emissions
 - For this, it is sufficient to give relatively general information to consumers on consumption or to take account of eco-audits when making purchasing decisions (Gatekeeper function of Retail sector)
- **Too early for CO₂ labeling:**
 - A label must be easy to understand; figures on their own are confusing especially when there is no harmonization between different labels
 - A label is useless unless it triggers an improvement or at least an offset by the supplier or consumer
 - Eco-labels that differ from country to country only create new trade barriers
- **Harmonization is imperative!**

Thank you for your attention



**For the only
World we have.**

coop

Für mich und dich.