

## LAMPIRAN

Lampiran 1. SNI 7387 – 2009 Tentang Batas maksimum cemaran logam berat dalam pangan (logam berat Timbal (Pb))

SNI 7387:2009

Tabel 5 (lanjutan)

| No. Kategori pangan                          | Kategori pangan  | Batas maksimum   |            |
|--|--|--|------------|
| 04.0   | Buah dan sayur (termasuk jamur, umbi, kacang termasuk kacang kedelai dan lidah buaya), rumput laut, biji-bijian  |  |            |
|  | Buah dan sayur serta hasil olahannya   | 0,5 mg/kg  |            |
|  | Pasta tomat  | 1,0 mg/kg  |            |
| 05.0   | Kembang gula/permen dan coklat   |  |            |
|  | Kembang gula/permen dan coklat   | 1,0 mg/kg  |            |
| 06.0   | Sereal dan produk sereal yang merupakan produk turunan dari biji sereal, akar dan umbi, kacang dan tepung (bagian dalam batang tanaman), tidak termasuk produk bakeri dari kategori 07.0 dan tidak termasuk kacang dari kategori 04.2.1 dan 04.2.2 |  |            |
|  | Sereal dan produk sereal   | 0,3 mg/kg  |            |
|  | Tepung teigu   | 1,0 mg/kg  |            |
| 07.0   | Produk bakeri  |  |            |
|  | Produk bakeri  | 0,5 mg/kg  |            |
| 08.0   | Daging dan produk daging, termasuk daging unggas dan daging hewan buruan   |  |            |
|  | Daging dan hasil olahannya   | 1,0 mg/kg  |            |
|  | Jeroan sapi, babi, kambing, unggas   | 1,0 mg/kg  |            |
| 09.0   | Ikan dan produk perikanan termasuk moluska, krustasea dan ekinodermata serta amfibi dan reptil   |  |            |
|  | Ikan dan hasil olahannya   | 0,3 mg/kg  |            |
|  | Ikan predator misalnya cucut, tuna, marlin dan lain-lain   | 0,4 mg/kg  |            |
|  | Kekerangan (bivalve) Moluska dan teripang  | 1,5 mg/kg  |            |
|  | Udang dan krustasea lainnya  | 0,5 mg/kg  |            |
| 11.0   | Terasi   | 1,0 mg/kg  |            |
|  | Pemanis, termasuk madu   |  |            |
|  | Madu   | 2,0 mg/kg  |            |
|  | 12.0   | Garam, rempah, sup, saus, salad, produk protein        |            |
|  |  | Garam  | 10,0 mg/kg |
| Rempah/Bumbu                                 |  | 7,0 mg/kg  |            |
| Kecap  |  | 1,0 mg/kg  |            |
| Ragi   |  | 5,0 mg/kg  |            |
| 13.0   | Saus   | 1,0 mg/kg  |            |
|  | Produk pangan untuk keperluan gizi khusus  |  |            |
|  | Susu formula bayi  | 0,02 mg/kg<br>(dihitung terhadap produk siap konsumsi) |            |
|  | Susu formula lanjutan  | 0,02 mg/kg<br>(dihitung terhadap produk siap konsumsi) |            |
|  | Makanan Pendamping ASI (MP-ASI) siap santap  | 0,3 mg/kg  |            |
|  | Makanan Pendamping ASI (MP-ASI) biskuit  | 0,3 mg/kg  |            |
|  | Makanan Pendamping ASI (MP-ASI) siap masak   | 1,14 mg/kg   |            |
| Makanan Pendamping ASI (MP-ASI) bubuk instan | 1,14 mg/kg   |  |            |

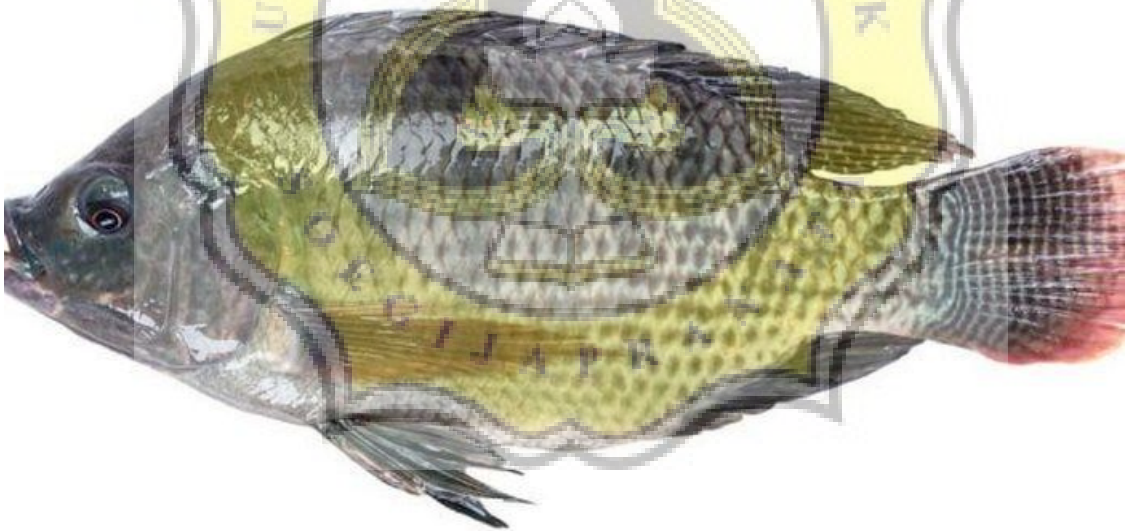
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Lampiran 2. Ikan Nila dari Waduk jatiluhur

1. Ikan Nila Merah



2. Ikan Nila Hitam



### Lampiran 3 Perhitungan Proksimat Ikan Nila

- Kadar Air

Rumus Kadar Air (*Wet Basis*) (%)

$$= \frac{(\text{berat cawan} + \text{sampel awal}) - (\text{berat cawan} + \text{sampel kering})}{(\text{berat cawan} + \text{sampel awal}) - (\text{berat cawan kosong})} \times 100\%$$

Berat sampel 10 gr

| Kode | Cawan kosong | Cawan + isi | Cawan +<br>sampel kering | % Kadar Air |
|------|--------------|-------------|--------------------------|-------------|
| A11  | 31,92        | 41,94       | 34,038                   | 78,86227545 |
| A12  | 24,94        | 34,93       | 26,981                   | 79,56956957 |
| A13  | 27,1         | 37,13       | 29,176                   | 79,30209372 |
| A21  | 21,82        | 31,83       | 23,862                   | 79,6003996  |
| A22  | 25,45        | 35,47       | 27,62                    | 78,34331337 |
| A23  | 29,39        | 39,43       | 31,465                   | 79,33266932 |

- Kadar Abu

Rumus Kadar Abu (%)

$$= \frac{(\text{berat cawan} + \text{abu}) - (\text{berat cawan kosong})}{(\text{berat cawan} + \text{sampel}) - (\text{berat cawan kosong})} \times 100\%$$

$$\% \text{ Abu BB} = \frac{(100 - \text{kadar}_{\text{air}})}{100} \times \text{kadar}_{\text{abu}}$$

Berat sampel 0.5 gr

| Kode | cawan kosong | cawan + isi | Sampel Kering | % Kadar Abu | % Abu BB    |
|------|--------------|-------------|---------------|-------------|-------------|
| A11  | 31,774       | 32,274      | 31,8          | 5,2         | 1,099161677 |
| A12  | 25,442       | 25,942      | 25,472        | 6           | 1,225825826 |
| A13  | 21,815       | 22,315      | 21,843        | 5,6         | 1,159082752 |
| A21  | 29,382       | 29,882      | 29,411        | 5,8         | 1,183176823 |
| A22  | 24,929       | 25,429      | 24,962        | 6,6         | 1,429341317 |
| A23  | 27,102       | 27,602      | 27,139        | 7,4         | 1,52938247  |

- Kadar Lemak

Rumus Kadar Lemak (%)

$$= \frac{\text{berat}_{\text{sampel awal}} - \text{berat}_{\text{sampel akhir}}}{\text{berat}_{\text{sampel awal}}} \times 100\%$$

$$\% \text{ Lemak BB} = \frac{(100 - \text{kadar}_{\text{air}})}{100} \times \text{kadar}_{\text{Lemak}}$$

Berat Sampel 0,5 gr

| Kode | cawan kosong | hasil  | % Kadar Lemak | % Lemak BB  |
|------|--------------|--------|---------------|-------------|
| A11  | 31,723       | 31,765 | 8,4           | 1,775568862 |
| A12  | 38,531       | 38,565 | 6,8           | 1,389269269 |
| A13  | 30,843       | 30,872 | 5,8           | 1,200478564 |
| A21  | 33,3         | 33,338 | 7,6           | 1,55036963  |
| A22  | 32,329       | 32,385 | 11,2          | 2,425548902 |
| A23  | 29,238       | 29,27  | 6,4           | 1,322709163 |

- Kadar Protein

Rumus Kadar Protein(%)

$$\% N = \frac{\text{volume HCl (sampel - blanko)} \times N \text{ HCl} \times 14,008}{\text{Berat sampel (gram)} \times 1000} \times 100 \%$$

% Protein = %N x faktor konversi (6,25)

$$\% \text{Protein BB} = \frac{(100 - \text{kadar air})}{100} \times \text{kadar protein}$$

| Kode | b. sampel | titrasi | % N      | % Protein bk | % Protein bb |
|------|-----------|---------|----------|--------------|--------------|
| A11  | 0,252     | 24,3    | 10,89433 | 68,08958333  | 14,39277613  |
| A12  | 0,253     | 25      | 11,23882 | 70,24261364  | 14,35126839  |
| A13  | 0,251     | 24,7    | 11,16096 | 69,7559761   | 14,43809193  |
| A21  | 0,254     | 25,4    | 11,41515 | 71,34470965  | 14,55432077  |
| A22  | 0,251     | 24,6    | 11,10515 | 69,40719622  | 15,0335987   |
| A23  | 0,253     | 25,1    | 11,29418 | 70,58863636  | 14,58925936  |

- Kadar Karbohidrat

Rumus Kadar Karbohidrat (%)

$$= 100\% - (\% \text{Air} + \% \text{Abu} + \% \text{Protein} + \% \text{Lemak})$$

$$A11 = 100 - (78,862 + 1,099 + 14,392 + 1,775) = 3,870$$

$$A12 = 100 - (79,569 + 1,225 + 14,351 + 1,389) = 3,464$$

$$A13 = 100 - (79,302 + 1,159 + 14,438 + 1,200) = 3,900$$

$$A21 = 100 - (79,600 + 1,183 + 14,554 + 1,550) = 3,112$$

$$A22 = 100 - (78,343 + 1,429 + 15,033 + 2,425) = 2,768$$

$$A23 = 100 - (79,332 + 1,529 + 14,589 + 1,322) = 3,226$$

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