2014 Barenbrug Seed Product Types

Products:

1. Baralfa 42 HY
   Fall dormancy 4 high forage yield
   DRI 30

2. Baralfa 425 ML
   Multileaf
   DRI 30 plus resistance to Aphanomyces root rot (Race 2)

3. Baralfa 334 SC
   Sunken crown
   DRI 30 plus resistance to Aphanomyces root rot (Race 2)

4. Baralfa FsT SF
   Fast growth habit
   DRI 30

5. Baralfa 380 BR
   Fall dormancy 4 branch root
   DRI 30 plus resistance to Aphanomyces root rot (Race 2)

6. Baralfa 53 FV
   Fall dormancy 5
   Sunken crown traffic tolerant

7. Baralfa 63 HR
   Fall dormancy 6 high forage yield
   Winter hardy semi-dormant
   Salt tolerant

8. Baralfa 240 RIZ
   Creeping root

9. Baralfa 350 PM
   Potato leaf hopper tolerant

10. Baralfa X42
    Hybrid alfalfa
BarAlfa 42 HY alfalfa is a high forage yielding, persistent alfalfa with excellent forage quality potential. It expresses quick re-growth after cutting to maximize the growing season. BarAlfa 42 HY performs best in high producing, well-drained soils. It has a solid disease, insect and nematode resistance package that helps defend itself in adverse environments. BarAlfa 42 HY is an alfalfa variety for the dairy or beef producer that demands high tonnages of dairy quality forage.

**Agronomic Summary**

<table>
<thead>
<tr>
<th>Disease/Infection</th>
<th>Resistance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacterial Wilt</td>
<td>HR</td>
<td>Blue Alfalfa Aphid</td>
</tr>
<tr>
<td>Fusarium Wilt</td>
<td>HR</td>
<td>Root type</td>
</tr>
<tr>
<td>Phytophthora Root Rot</td>
<td>HR</td>
<td>Winter Survival</td>
</tr>
<tr>
<td>Anthracnose (Race 1)</td>
<td>HR</td>
<td>Fall Dormancy</td>
</tr>
<tr>
<td>Verticillium Wilt</td>
<td>HR</td>
<td>DRI</td>
</tr>
<tr>
<td>Aphanomyces Root Rot (Race 1)</td>
<td>HR</td>
<td>Cutting Recovery</td>
</tr>
<tr>
<td>Aphanomyces Root Rot (Race 2)</td>
<td>R</td>
<td>Forage Yield Level</td>
</tr>
<tr>
<td>Stem Nematode</td>
<td>R</td>
<td>Forage Quality</td>
</tr>
<tr>
<td>Northern root-knot Nematode</td>
<td>R</td>
<td>Wheel Traffic</td>
</tr>
<tr>
<td>Pea Aphid</td>
<td>R</td>
<td></td>
</tr>
</tbody>
</table>

*: 1-10, 10 is best
Baralfa 425 ML brand alfalfa is a multileaf, high forage yielding, persistent alfalfa that produces excellent forage quality. Baralfa 425 ML performs best in high producing, well-drained soils. It has a solid disease, insect and nematode resistance package that helps defend it self in adverse environments. Baralfa 425 ML is an alfalfa variety for the dairy or beef producer that demands high tonnages of dairy quality forage.

**Agronomic Summary**

<table>
<thead>
<tr>
<th>Disease</th>
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<tbody>
<tr>
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</tr>
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<td>Fusarium Wilt</td>
<td>HR</td>
</tr>
<tr>
<td>Phytophthora Root Rot</td>
<td>HR</td>
</tr>
<tr>
<td>Anthracnose (Race 1)</td>
<td>HR</td>
</tr>
<tr>
<td>Verticillium Wilt</td>
<td>HR</td>
</tr>
<tr>
<td>Aphanomyces Root Rot (Race 1)</td>
<td>HR</td>
</tr>
<tr>
<td>Aphanomyces Root Rot (Race 2)</td>
<td>R</td>
</tr>
<tr>
<td>Stem Nematode</td>
<td>R</td>
</tr>
<tr>
<td>Northern root-knot Nematode</td>
<td>R</td>
</tr>
<tr>
<td>Pea Aphid</td>
<td>R</td>
</tr>
<tr>
<td>Root type</td>
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<td>Fall Dormancy</td>
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<tr>
<td>DRI (Including Aph. Race 2)</td>
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<tr>
<td>Cutting Recovery</td>
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<tr>
<td>Forage Yield Level</td>
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<td>Forage Quality</td>
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<tr>
<td>Wheel Traffic</td>
<td>7.4*</td>
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</tbody>
</table>

*: 1-10, 10 is best
Baralfa 334 SC brand alfalfa has deep crowned, high forage yielding variety. It carries the sunken crown trait, which helps insulate the crown in severe winter weather. The sunken crown also helps protect the crown from equipment wheel traffic and animal hoof damage. Baralfa 334 SC expresses quick re-growth after cutting with an upright growth habit. Baralfa 334 SC has exceptional forage quality capabilities along with an excellent disease, insect and nematode resistance package.

**Agronomic Summary**

- **Bacterial Wilt:** HR
- **Fusarium Wilt:** HR
- **Phytophthora Root Rot:** HR
- **Anthracnose (Race 1):** HR
- **Verticillium Wilt:** HR
- **Aphanomyces Root Rot (Race 1):** HR
- **Aphanomyces Root Rot (Race 2):** R
- **Stem Nematode:** R
- **Root Type:** Tap
- **Crown Type:** Sunken
- **Winter Survival:** 1.5
- **Fall Dormancy:** 3
- **DRI:** 30
- **DRI (Including Aph. Race 2):** 34
- **Cutting Recovery:** 7.9*
- **Forage Yield Level:** 8.2*
- **Forage Quality:** 7.9*
- **Wheel Traffic:** 8.3*

*: 1-10, 10 is best
Baralfa FsT SF is a fast growth StandFast® alfalfa for the aggressive alfalfa manager to maximize each season’s harvestable yield. It is a medium tall, leafy variety that reaches harvest maturity 3-5 days ahead of conventional dormant alfalfa varieties. Baralfa FsT SF is a multifoliate alfalfa delivering a high forage quality herbage.

## Agronomic Summary

<table>
<thead>
<tr>
<th>Disease Type</th>
<th>Index</th>
<th>Root Type</th>
<th>Crown Type</th>
<th>Tap Type</th>
<th>Winter Survival</th>
<th>Fall Dormancy</th>
<th>DRI</th>
<th>Cutting Recovery</th>
<th>Forage Yield Level</th>
<th>Forage Quality</th>
<th>Wheel Traffic</th>
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<tbody>
<tr>
<td>Bacterial Wilt</td>
<td>HR</td>
<td>HR</td>
<td>HR</td>
<td>Tap</td>
<td>1.5</td>
<td>4.0</td>
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<td>9.2*</td>
<td>9.0*</td>
<td>8.9*</td>
</tr>
<tr>
<td>Fusarium Wilt</td>
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<td>HR</td>
<td>HR</td>
<td>Tap</td>
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<td>4.0</td>
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<td>Phytophthora Root Rot</td>
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<td>HR</td>
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<td>4.0</td>
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<td>9.2*</td>
<td>9.0*</td>
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<tr>
<td>Anthracnose (Race 1)</td>
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<td>HR</td>
<td>HR</td>
<td>Tap</td>
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<td>4.0</td>
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<td>9.2*</td>
<td>9.0*</td>
<td>8.9*</td>
</tr>
<tr>
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<td>HR</td>
<td>Tap</td>
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<td>4.0</td>
<td>30</td>
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<td>9.2*</td>
<td>9.0*</td>
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</tr>
<tr>
<td>Verticillium Wilt</td>
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<td>HR</td>
<td>HR</td>
<td>Tap</td>
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<td>4.0</td>
<td>30</td>
<td>9.2*</td>
<td>9.2*</td>
<td>9.0*</td>
<td>8.9*</td>
</tr>
<tr>
<td>Northern root-knot Nematode</td>
<td>HR</td>
<td>HR</td>
<td>HR</td>
<td>Tap</td>
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<td>4.0</td>
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<tr>
<td>Pea Aphid</td>
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<td>MR</td>
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<td>4.0</td>
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<tr>
<td>Spotted Alfalfa Aphid</td>
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<td>9.2*</td>
<td>9.2*</td>
<td>9.0*</td>
<td>8.9*</td>
</tr>
</tbody>
</table>

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Baralfa 380 BR brand alfalfa is branched rooted, high forage yielding winter hardy variety designed for the poorly drained soils. Its root system has been genetically designed with a greater degree of the branch rooted trait. This trait helps keep more of the root system above the water table and better secures the plant in the ground when freezing and thawing occurs. The branch-rooted trait will adjust as moisture stresses intensify. Baralfa 380 BR would be a good companion alfalfa to a highly productive tap rooted variety.

**Agronomic Summary**

- **Bacterial Wilt**: HR
- **Fusarium Wilt**: HR
- **Phytophthora Root Rot**: HR
- **Verticillium Wilt**: HR
- **Anthracnose (Race 1)**: HR
- **Aphanomyces Root Rot (Race 1)**: HR
- **Aphanomyces Root Rot (Race 2)**: R
- **Stem Nematode**: R
- **Northern root-knot nematode**: R
- **Spotted Alfalfa Aphid**: R
- **Pea Aphid**: R
- **Root Type**: Branch
- **Winter Survival Index**: 1.7
- **Fall Dormancy**: 3.8
- **DRI**: 30
- **DRI (Including Aph. Race 2)**: 34
- **Cutting Recovery**: 7.8*
- **Forage Yield Level**: 8.0*
- **Forage Quality**: 7.8*
- **Wheel Traffic**: 8.3*

*: 1-10, 10 is best
Baralfa 53 FV is a high forage yielding fall dormancy 5 alfalfa with excellent forage quality potential. It has an extended growing season to capture more tons. Baralfa 53 FV expresses quick re-growth after cutting to maximize the growing season. It has a solid disease, insect and nematode resistance package that helps defend itself in adverse environments. Baralfa 53 FV is an alfalfa variety for the dairy or beef producer that demands high tonnages of dairy quality forage.

**Agronomic Summary**

- **Bacterial Wilt**: HR
- **Fusarium Wilt**: HR
- **Phytophthora Root Rot**: HR
- **Anthracnose (Race 1)**: HR
- **Verticillium Wilt**: HR
- **Aphanomyces Root Rot (Race 1)**: R
- **Stem Nematode**: R
- **Northern root-knot Nematode**: HR
- **Pea Aphid**: R
- **Winter Survival**: 1.9
- **Fall Dormancy**: 5.0
- **DRI**: 29
- **Root Type**: Tap
- **Crown Depth**: Sunken
- **Cutting Recovery**: 9.2*
- **Forage Yield Level**: 9.3*
- **Forage Quality**: 8.9*
- **Wheel Traffic**: 9.2*

*: 1-10, 10 is best
Baralfa 63 HR brand is a spring frost tolerant, winter hardy, fast growing semi-dormant alfalfa variety. It expresses a bushy dormant type of growth habit with quicker re-growth after cutting than dormant alfalfas. Baralfa 63 HR FD6 expresses very high forage yield capabilities in both a dormant and semi-dormant environment. Baralfa 63 HR FD6’s forage quality capabilities are among the best dormant varieties. It is tolerant to saline soils and expresses a strong disease package along with insect and nematode resistance.

**Agronomic Summary**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Resistance</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacterial Wilt</td>
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<td>Cutting Recovery</td>
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<tr>
<td>Northern Root-knot Nematode</td>
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<td>Pea Aphid</td>
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<tr>
<td>Fusarium Wilt</td>
<td>HR</td>
<td>Forage Yield Level</td>
<td>8.4*</td>
</tr>
<tr>
<td>Winter Survival Index</td>
<td>3.0</td>
<td>Spotted Alfalfa Aphid</td>
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<tr>
<td>Phytophthora Root Rot</td>
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<td>Forage Quality</td>
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<tr>
<td>Fall Dormancy</td>
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<tr>
<td>Anthracnose (Race 1)</td>
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<td>Verticillium Wilt</td>
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<td>Spring Frost</td>
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</tbody>
</table>

*: 1-10, 10 is best
Baralfa 240 RIZ alfalfa is a creeping rooted alfalfa with rhizomatous stems designed for dry land pastures the United States and Western Canada. As the alfalfa stand gets older the adventitious stems develops new crowns to fill in the stand. Baralfa 240 RIZ can also be used for both hay and pasture. It expresses the branch rooted trait that can tolerate wet soil conditions.

**Key Features**
- Extensive Rhizomes
- Branch Root
- Disease Resistant
- Drought Tolerant
- Multi-purpose

**Benefits**
- Thicken stands
- Tolerate wet soils
- Wide adaptation
- Excellent persistent
- Used for hay or pasture

**Agronomic Summary**
- Bacterial Wilt: HR
- Fusarium Wilt: HR
- Phytophthora Root Rot: HR
- Anthracnose (Race 1): HR
- Verticillium Wilt: HR
- Aphanomyces Root Rot (Race 1): R
- Root Type: Branch
- Crown Type: Rhizomatous (Creeping)
- Winter Survival Index: 2.0
- Fall Dormancy: 2.4
- Cutting recovery*: 7.2
- Forage Yield Level*: 8.2
- Forage Quality: 8.0
- Wheel Traffic Tolerance*: 8.5

*: 1-10, 10 is best
Baralfa 350 PM brand expresses tolerance to potato leaf hopper infestations. It is a winter hardy, good forage yield variety with exceptional forage quality characteristics. Baralfa 350 PM seed can be sold untreated for organic forage production. When potato leaf hopper infestations become severe, spraying may be necessary.

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<tr>
<td>Potato leaf hopper</td>
<td>HR</td>
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<tr>
<td>Fusarium Wilt</td>
<td>HR</td>
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<tr>
<td>Winter Survival Index</td>
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<tr>
<td>Phytophthora Root Rot</td>
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<tr>
<td>Cutting Recovery</td>
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<td>Aphanomyces root rot</td>
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<tr>
<td>Forage Yield Level</td>
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<td>Verticillium wilt</td>
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<td>Forage Quality</td>
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<td>DRI</td>
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</tr>
<tr>
<td>Wheel Traffic</td>
<td>7.3*</td>
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BARALFA X42 HYBRID ALFALFA

Baralfa X42 a high forage yielding, hybrid alfalfa. It delivers aggressive re-growth of a fine stemmed herbage, which delivers consistent high quality forage. This fine stem characteristic makes a dense, attractive alfalfa bale.

Key Features

Hybrid Forage Yield Potential
Fine Stems
Drought Tolerance

Benefits

More tons of forage
Faster dry down
Less wasted forage
Productive in dry years

Disease

Bacterial Wilt HR
Fusarium Wilt HR
Phytophthora Root Rot HR
Verticillium Wilt HR
Anthracnose (Race 1) HR
Aphanomyces Root Rot (Race 1) HR
DRI 30

Nematode

Stem Nematode HR
Northern Root knot-Nematode HR
Southern Root knot-Nematode R

Agronomic Traits

Winter Survival 1.8
Fall Dormancy 4.0
Root Type Tap
Crown Type Average
Cutting Recovery 9.2*
Yield Level 9.5*
Wheel Traffic Tolerance 8.2*
Forage Quality 9.3*

*: 1-10, 10 is best

Fine Stem Forge